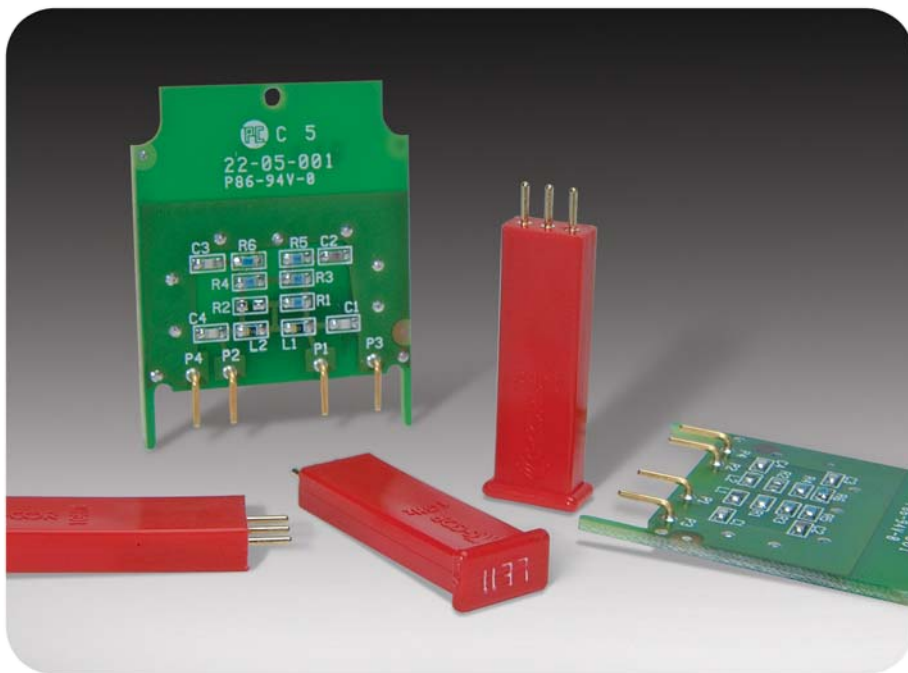




HFC Product Accessories

Reference Guide



ARRIS offers a full complement of plug-in accessories for our strand-mount, cabinet-mount, and rack-mount transmission and distribution equipment. In most cases, these plug-in accessories can be shared across similar product lines.

Options include:

- Tested and designed specifically for ARRIS products by our ARRIS engineers
- ARRIS accessories are designed for full functionality over operating temperature
- ARRIS authorized accessories should be used for guaranteed performance
- Product warranties are applicable exclusively to ARRIS authorized accessories
- forward and return attenuators (PADs)
- forward and return equalizers
- forward cable simulators
- input configuration modules
- output distribution accessories
- active and passive return channel modules
- diplexers
- automatic gain control modules
- control (signature correction) modules

The first section, *Accessories By Product Line*, provides a broad overview of the accessories available for each ARRIS product. A series of sections, organized under *Forward Path Accessories*, *Return Path Accessories*, and *Miscellaneous Accessories* follow; these sections list all accessories with a photo (where available) and basic information regarding the product usage. The last section provides *Technical Specifications* for each accessory listed. Contact your ARRIS sales professional if you do not see the ARRIS broadband transmission or distribution product of interest.

ACCESSORIES BY PRODUCT LINE

Table 1 ARRIS Flex Max® RF Amplifiers

Model	P/N Prefix	Forward PADS	Forward Equalizers	Cable Simulators	Return PADS	Return Equalizers	Output Distribution Accessories
FM901e-T¹ Trunk	FMTEG	NPB	SEQ-1G SEQ-862 SEQ-750 GEQC-1G (O/P) GEQC-870 (O/P) GEQL-1G (O/P)	SCS-1G	NPB ²	MEQ-42, 55, 65, 85 MEQT-42, 85	S-Series
FM901e-B¹ Bridger	FMBEG	NPB	SEQ-1G SEQ862 SEQ750	SCS-1G	NPB ²	MEQ-42, 55, 65, 85 MEQT-42, 85	S-Series
FM601e-T Trunk¹	FM6T	10-A-WC	PEQ-1G 7-2E862-WC 7-2E750-WC	PCS-1G	10-A-WC	7-REF42/x-WC 7-REF55/x-WC 7-REF65/x-WC	7-DC-Series
FM601e-B Bridger¹	FM6B	10-A-WC THRM	PEQ-1G 7-2E862-WC 7-2E750-WC	PCS-1G	10-A-WC ²	7-REF42/x-WC 7-REF55/x-WC 7-REF65/x-WC	7-DC-Series
FM601e-LE Line Extender¹	FM6E	10-A-WC THRM	PEQ-1G 7-2E862-WC 7-2E750-WC	PCS-1G	10-A-WC ²	7-REF42/x-WC	N/A
FM331-LE Line Extender¹	FML1G	NPB Amini (interstage)	SEQ-1G SEQ-862 W/O SEQ-750 W/O	SCS-1G	NPB	MEQ-42, 55, 65, 85 MEQT-42, 85	N/A
FM321e-LE Line Extender¹	FM321G	10-A-WC THRM	PEQ-1G 7-2E862-WC 7-2E750-WC	PCS-1G	10-A-WC	9-A/*-WC 10-A/*-WC	N/A
Key N/A: not applicable W/O: without covers WC: with covers							

- Signature Correction Modules are available for all ARRIS Flex Max RF amplifiers.
- Noise Filter may be used in the Return PAD location. FM901e-T/B require a standard height noise filter be used in combination with an adaptor in the Return PAD location. For FM401, the taller (1.4 inch) noise filter is recommended for ease of installation and removal.

Table 2 ARRIS Starline RF Amplifiers

Model	PN Prefix	Forward PADS	Forward Equalizers	Cable Simulators	Return PADS	Return Equalizers	Output Distribution Accessories	Automatic Gain Control
BT100 Amplifier	BT100	JXP-*B	SFE-100-*R	SCS-*	JXP-*B	SRE	N/A	TDU ADU QADU
MBV3 MiniBridger	MBV3	JXP-*B	SFE-100-*R	SCS-*	JXP-*B	SRE	N/A	TDU/V ADU/V QADU/V
MB100 MiniBridger	MB100	JXP-*B	SFE-100-*R	SCS-*	JXP-*B	SRE	SP100 DC100	TDU ADU QADU
BLE100 Line Extender	BLE100	JXP-*B	SFE-100-*R	SCS-*	JXP-*B	SRE	N/A	TDU ADU QADU

Table 3 ARRIS Optical Products

Model	P/N Prefix	Forward PADS	Forward Equalizers	Cable Simulators	Return PADS	Output Distribution Accessories	Freq. Split Accessories
CHP Dual TX		Amini Short	CHP Plug-in EQ	N/A	N/A	N/A	N/A
CHP Single TX		CHP PAD	N/A	N/A	N/A	N/A	N/A
Opti Max OM4120	OM412	NPB	EQL-1.2GHZ GEQL-1GHZ GEQL-870	N/A	NPB	N/A	
Opti Max OM6000	OM6	NPB	EQL-1.2GHZ GEQL-1GHZ GEQL-870	N/A	NPB	N/A	RPLPF Roll-off Compensation Board Diplex Filter
Opti Max OM4100	OM41	NPB	GEQL-1GHZ GEQL-870	N/A	NPB	N/A	
Trans Max TM4100	TM41	N/A	N/A	N/A	NPB (analog only)	N/A	
Opti Max OM2741 ¹	OM27	NPB	GEQL-1GHZ GEQL-870 GEQC-1GHZ GEQC-870 SEQ-1G SEQ-870 SEQ-750	SCS-1G	NPB	S-Series	RPLPF Roll-off Compensation Board Diplex Filter
Opti Max OM1111	OM11G	10-A-WC ¹	GEQL-1GHZ-xxx-1 GEQL-870-xxx-1	N/A	10-A-WC	N/A	
NC2000 1.2 GHz Series	NC2	AP-4100x-L	EQ21xxE-1.2GHZ EQ21xxG-1GHZ EQ21xx-870MHZ	N/A	AP-4100x-L	N/A	
NC4000 1.2 GHz Series	NC4	AP-4100x-L	EQ21xxE-1.2GHZ EQ21xxG-1GHZ EQ21xx-870MHZ	N/A	AP-4100x-L	N/A	
SG4000	SG4	JXP-B*	LME-87-* LME-100-*	N/A	JXP-B*	N/A	RPLPF Roll-off Compensation Board Diplex Filter
VTN244		JXP-B*	FLEQ	N/A	JXP-B*	N/A	
Key							
N/A: not applicable							
W/O:without covers; WC:with covers							

Table 4 ARRIS Taps and Equalizers

Model	Cable Equalizers	Cable Simulators	Return Attenuators	Plug-in Equalizer Board
12000-L-PBT 1.2GHz Taps	T-EQ-*-Q	T-CS-*-Q	T-RPA/K-*-Q	N/A
BTTF-*-Q 1.2GHz Taps	T-EQ-*-Q	T-CS-*-Q	T-RPA/S-*	N/A
FFE-*-120*/RP Equalizers	N/A	N/A	N/A	G120-*
FFT-*-Q 1.2GHz Taps	T-EQ-*-Q	T-CS-*-Q	T-RPA/K-*-Q	N/A
RMT2120 1.2 GHz Taps	T-EQ-*-Q	T-CS-*-Q	T-RPA/K-*-Q	N/A

Accessories by Product Line—Discontinued Legacy ARRIS Products

Legacy products listed below have been discontinued by ARRIS. Please consult your authorized ARRIS sales representative for upgrade options.

The following tables list available accessories that support the installed legacy products.

Table 5 Legacy Flex Max® RF Amplifiers

Model	P/N Prefix	Forward PADS	Forward Equalizers	Cable Simulators	Return PADS	Return Equalizers	Output Distribution Accessories
Flex Max901 Trunk/Bridger	FMT1G FMB1G	NPB	SEQ-1G SEQ-862 W/O SEQ-750 W/O	SCS-1G	NPB	MEQ-42 MEQT-42	S-Series
Flex Max900 Trunk/Bridger	FNT9 FNB9	SPB	SEQ-862 SEQ-750 SEQPB	SCS-862	SPB	MEQ-42, 55, 65, 85 MEQT-42, 85	S-Series
Flex Max601 Bridger	FM6B	10-A-WC	PEQ-1G 7-2E862-WC 7-2E750-WC	PCS-1G	10-A-WC ¹	7-REF42/x-WC	7-DC-Series
Flex Max601 Line Extender	FM6L	10-A-WC	PEQ-1G 7-2E862-WC 7-2E750-WC	PCS-1G	10-A-WC ¹	7-REF42/x-WC	N/A
FM401^{1, 2}	FM401	NPB	FEQC-1G FEQC-870 FEQC-750	CBSM-1G	NPB ²	REQC-42 REQC-65 REQC-85	7-DC-Series ³
Flex Max340	NL1x NL2x	SPB	SEQ-862 SEQ-750	SCS-862	SPB	MEQ-42, 55, 65, 85 MEQT-42, 85	N/A
Flex Max330	FM330	NPB	SEQ-862 W/O SEQ-750 W/O	SCS-862 W/O	NPB	MEQ-42 MEQT-42	N/A
Flex Max321	FM321G	10-A-WC	PEQ-1G 7-2E862-WC 7-2E750-WC	PCS-1G	10-A-WC	7-REF42/x-WC	N/A
Flex Max320	AMP008x	10-A-WC THRM	7-2E862-WC 7-2E750-WC	PCS-1G	10-A-WC	7-REF42/x-WC 7-REF55/x-WC 7-REF65/x-WC	N/A
Flex Max222	FM222	NPB Amini	Amini	N/A	Amini ¹	Amini	7-DC-Series
Flex Max220P	FM220-P	NPB Amini	E862/xx E606/xx	CE862/x	Amini ¹	Amini	N/A
Flex Max220B	FM220-B	NPB Amini	Amini	N/A	Amini ¹	Amini	N/A
Key	N/A: not applicable						
	W/O: without covers		WC: with covers				

- Noise Filter may be used in the Return PAD location.
- D30/47, D42/54, and D55/70 plug-in diplex filters are available. The original diplex filters were qualified for use in 870 MHz systems. The new diplex filters are qualified for use in 1 GHz systems. The new diplex filters have the same model numbers as the original diplex filters.
- 7-DC-Series accessories may also be used in the Input Splitter location.

Table 6 Legacy Motorola Starline RF Amplifiers

Model	PN Prefix	Forward PADS	Forward Equalizers	Cable Simulators	Return PADS	Return Equalizers	Output Distribution Accessories	Automatic Gain Control
SLE100 Line Extender	SLE100	JXP-*B	SFE-100-*R	SCS-*	JXP-*B	SRE	SP100 DC100	SLE-ADU

Table 7 Legacy C-COR & Philips RF Amplifiers

Model	P/N Prefix	Forward PADS	Forward Equalizers	Cable Simulators	Return PADS	Return Equalizers	Output Distribution Accessories
FlexNet800	FNT8 FNB8 E8	SPB	SEQ-862 SEQ-750 SEQPB	SCS-862	SPB RPB	MEQ-42, 55, 65, 85 MEQT-42, 85	S-Series
FlexNet700	FNT7 FNB7	SPB	SEQ-750 SEQPB	SCS-862	SPB RPB	MEQ-42, 55, 65, 85 MEQT-42, 85	S-Series
E900	E9	SPB	SEQ-862 SEQ-750	SCS-862	SPB RPB	MEQ-42, 55, 65, 85 MEQT-42, 85	N/A
E700	E7	SPB	SEQ-862 SEQ-750 SEQPB	SCS-862	SPB RPB	MEQ-42, 55, 65, 85 MEQT-42, 85	N/A
Diamond Line I & II	T3A	10-A-WC	7-2E862-WC 7-2E750-WC	7-2E862C-WC	10-A-WC	7-REF42/x-WC 7-REF55/x-WC 7-REF65/x-WC	7-DC-Series
Diamond Line III	G3A	10-A-WC	7-2E862-WC 7-2E750-WC	7-2E862C-WC	10-A-WC	7-REF42/x-WC 7-REF55/x-WC 7-REF65/x-WC	N/A
GNA/TNA		10-A-L	7-2E750 W/O	7-2E862C-W/O	10-A-L	7-REF42/x-WC 7-REF55/x-WC 7-REF65/x-WC	7-DC-Series
Key	N/A: not applicable						
	W/O:without covers		WC:with covers				

Table 8 Legacy Optical Products

Model	P/N Prefix	Forward PADS	Forward Equalizers	Cable Simulators	Return PADS	Return Equalizers	Output Distribution Accessories
Opti Max OM3101	OM31C	10-A-WC ¹	GEQL-1GHZ-xxx-1 GEQL-870-xxx-1	N/A	10-A-WC	7-DC-Series	N/A
Opti Max OM3100	OM31G	10-A-WC 9-A-S (RX only)	GEQL-1GHZ-xxx-1 GEQL-870-xxx-1	N/A	10-A-WC	N/A	N/A
Opti Max OM2741¹	OM27	NPB	GEQL-1GHZ GEQL-870 GEQC-1GHZ GEQC-870 SEQ-1G SEQ-870 SEQ-750	SCS-1G	NPB	S-Series	N/A
Opti Max OM2100	OM21G	NPB Amini	GEQL-1GHZ GEQL-870	N/A	NPB Amini	NPB/Amini 7-DC-Series	N/A
Opti Max OM4000	OM41G	NPB	NEQL-870	N/A	NPB ²	N/A	N/A

Table 8 Legacy Optical Products (cont'd)

Model	P/N Prefix	Forward PADS	Forward Equalizers	Cable Simulators	Return PADS	Return Equalizers	Output Distribution Accessories
Opti Max OM3000	OM3	10-A-WC 9-A-S (RX only)	7-TG862-WC	N/A	10-A-WC ¹	N/A	N/A
Opti Max OM2000³	OM2	Amini	Amini	N/A	Amini	Amini	N/A
Opti Max OM1220	OM12	Amini	N/A	N/A	Amini	N/A	7-DC-Series
Opti Max OM1000	OM1	10-A-WC	7-2E862/x-WC	7-2E862C-WC	10-A-WC ¹	N/A	N/A
Optiworx ISX3040 Optiworx ISX3025	N/A	IPADxxx	ISX750EQyy ISX870EQyy IX7EQyy IX8EQyy	N/A	IPADxxx	ISX750EQyy ISX870EQyy IX7EQyy IX8EQyy	N/A
Optiworx ISX3030	N/A	TPADxxx	ISX750EQyy	N/A	TPADxxx	ISX750EQyy	N/A
LN-SM3x	N/A	IPB	N/A	N/A	N/A	N/A	S-Series
LN-SM7x	N/A	SPB	SEQ-750	SCS-862	SPB	SM-MEQF42 MEQ-42 MEQT-42	S-Series
BTN2000	N/A	JXP-B*	LME-100-*	N/A	JXP-B*	N/A	N/A
MBN100	N/A						
MPN100	N/A						
VSN200	N/A						
SG1000	SG1						
SG2000	SG2	JXP-*A	SG2-FE-*/750 SG2-FE-*/870	N/A	JXP-*A	N/A	N/A
Harmonic HLN3142E	HLN	NPD38xx	NLE31xx	N/A	NPD38xx	NLE31xx	N/A
Harmonic HLN3142 PWRBlazer II	HLN						
Harmonic PWRBlazer HLN 3144	HLN						
NC2000 1GHz Series	NC2	AP40xx	EQ21xx (RF module) EQ41xx (analog receivers)	N/A	AP40xx	N/A	N/A
Key	N/A: not applicable						
	W/O:without covers		WC:with covers				

1. D30/47, D42/54, and D55/70 plug-in diplex filters are available. The original diplex filters were qualified for use in 870 MHz systems. The new diplex filters are qualified for use in 1 GHz systems. The new diplex filters have the same model numbers as the original diplex filters.
2. Noise Filter may be used in the Return PAD location.
3. Legacy D30/47, D42/54, and D55/70 plug-in diplex filters are available.

Table 9 Legacy Motorola Taps

Model	Cable Equalizers	Cable Simulators	Return Attenuators	Plug-in Equalizer Board
BTTF*-*P 1GHz Taps	T-EQ-*	T-CS-*	T-RPA/S-*	N/A
FFT*-*P 1GHz Taps	T-EQ-*	T-CS-*	T-RPA/S-*	N/A

Table 10 Legacy Accessories

The following accessories are no longer available from ARRIS:	
9A	9-A-S series attenuators have replaced the 9-A series attenuators.
9-A-WC	10-A-WC series attenuators have replaced the 9-A-WC series attenuators.
6-2E862 6-2E750	7-2E862 forward equalizers may be used in place of 6-2E862 and 6-2E750 forward equalizers. The plastic cover must be removed from 7-series accessories to enable them to fit into equalizer locations designed for the 6-series accessories.
7-2E750C	PCS-1G and 7-2E862C forward cable simulators may be used in place of the 7-2E750C forward cable simulators.
A862	Fixed attenuator for legacy FM220 Plus/FM500. No replacement.
CE862	Cable simulator/equivalent for FM220 Plus/FM400/FM500. No replacement.
CM862	Control module/system equalizer for FM400/FM500/OM2000. No replacement.
D65/85	65/85MHz Duplex filter for FM220Plus/FM400/FM500/ OM1220/OM2000. No replacement.
E606	Plug-in equalizer for FM400/FM500. No replacement.
E862	Plug-in equalizer for FM220Plus/FM400/FM500. No replacement.
IPB	Amini PADs replace IPB style PADs (AT0xxx).
SCS-750	SCS-862 forward cable simulators may be used in place of the SCS-750 forward cable simulators.

FORWARD PATH ACCESSORIES

Forward Path Attenuator Pads

9-A-S Forward/Return Attenuators

Product Usage: Opti Max OM3100 (RX only), CHP Max5000 Single TX

Legacy Product Usage: Opti Max3000 (RX only)

Notes:

1. Height is 0.6", pin spacing is 0.125"
2. Molded blue plastic
3. Same footprint as Amini Short PADs but may be limited by height constraints
Zero value is possible exception due to performance



10-A-L and 10-A-WC Forward/Return Attenuators

Product Usage: 10-A-WC: Flex Max FM601e T/B/LE, Flex Max FM321e-LE, OptiMax OM3101, OptiMax OM3100, OptiMax OM1111

Legacy Product Usage: 10-A-L: GNA/TNA; 10-A-WC: Flex Max601 Bridger & Line Extender, Flex Max321, Flex Max320, Diamond Line I, II, & III, Opti Max3000, Opti Max1000

Notes:

1. Height is 1.15", pin spacing is 0.125"
2. 10-A-L: molded blue plastic without guide pins; 10-A-WC: molded blue plastic with guide pins
3. 10-A-WC cannot be plugged into products using NPB or Amini PADs because of guide pins
4. Same footprint as NPB and Amini PADs but may be limited by height constraints
Zero value is possible exception due to performance



Amini Attenuators

Product Usage: Flex Max FM331-LE (interstage), Opti Max OM2100

Legacy Product Usage: Flex Max222, Flex Max220 Plus, Flex Max220 Basic, Flex Max500, Flex Max400, Opti Max2000, Opti Max1220

Notes:

1. Height is 1.0", pin spacing is 0.125".
2. Molded orange plastic
3. Can be plugged into Legacy Philips products using 10-A-WC attenuators, but no guiding mechanism
4. Same footprint as NPB and 10-A attenuators but may be limited by height constraints



Amini Short Attenuators

Product Usage: CHP Dual Transmitter

Notes:

1. Height is 0.5", pin spacing is 0.125"
2. Molded orange plastic
3. Same footprint as 9-A-S attenuators but may be limited by height constraints and lip around top of accessory



AP-40xx-L Series Forward/Return Path Attenuators

Product Usage: NC2000, NC4000

Notes:

1. Height is 1.0"
2. Molded orange plastic; orange color denotes 1200 MHz rating



JXP Forward/Return Path Attenuators

Product Usage: BLE100, MB100, MBV3, BT100, SLE100, SG4000, VSN

Note:

1. Height is 1.375", pin spacing is 0.125"
2. Molded blue plastic



NPB Forward/Return Path Attenuators

Product Usage: Flex Max FM901e-T/B, Flex Max FM401, Flex Max FM331-LE, Opti Max OM4100, Trans Max TM4100, Opti Max OM2700, Opti Max OM2100

Legacy Product Usage: Flex Max901, Flex Max330, Flex Max222, Flex Max220 Plus, Flex Max220 Basic, Opti Max4000

Notes:

1. Height is 1.4", pin spacing is 0.125"
2. Molded green plastic
3. Same footprint as 10-A and Amini PADs but may be limited by height constraints



NPD38xx Forward/Return Path Attenuators

Legacy Product Usage: HLN3142, HLN3142E, HLN3144

Note:

1. 0.75 in. long
2. Molded yellow plastic.



SEQPB-xx EQ Form Factor Attenuators

Legacy Product Usage: Flex Max900, FlexNet 800, FlexNet 700, E700

Note:

1. Plugs into the equalizer location to add flat attenuation across the passband



SPB-xxx Forward/Return Attenuators

Legacy Product Usage: Flex Max900, Flex Max340, FlexNet 800, FlexNet 700, E900, E700, LN-SM7x

Notes:

1. Height is 1.10", pin spacing is 0.20"
2. Molded green plastic
3. SPB-0 can be used as a jumper in the distribution accessory location for a single output



THRM Thermal Attenuators

Product Usage: Flex Max FM321e-LE, FM601e-B

Legacy Product Usage: Flex Max320

Notes:

1. Blue plastic cover to protect components



THRM Thermal Attenuators

Product Usage: Flex Max FM601e-LE

Notes:

1. No blue plastic cover.



Cable Simulators

7-2E862/Cx-WC Forward Path Cable Simulators

Legacy Product Usage: Opti Max1000, Diamond Line I, II & III, GNA/TNA

Notes:

1. Legacy Philips
2. Blue plastic cover to protect components
3. Can be used in GNA/TNA products with the cover removed.



CBSM-1G Series Cable Simulators

Legacy Product Usage: Flex Max FM401

Notes:

1. Height is 1.4"
2. Molded white plastic

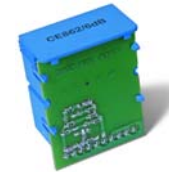


CE862/xx Cable Simulators (Equivalents)

Legacy Product Usage: Flex Max FM220 Plus

Note:

1. Blue plastic cover to protect components



PCS-1G-xx Cable Simulators

Product Usage: Flex Max FM601e-T/B/LE, Flex Max FM321e-LE

Legacy Product Usage: Flex Max FM601 Bridger & Line Extender, Flex Max FM321, Flex Max FM320

Note:

1. Blue plastic cover to protect components



SCS Forward Cable Simulator

Product Usage: BLE100, MB100, MBV3, BT100, SLE100

Notes:

1. STARLINE amplifiers
2. Blue plastic cover to protect components



SCS-1G-xx Cable Simulators

Product Usage: Flex Max FM901e-T/B, , Flex Max FM331-LE

Legacy Product Usage: Flex Max FM901, Opti Max OM2700

Note:

1. Cannot be plugged into FM330 or Legacy C-COR Amps due to guide pins



SCS862-xx Cable Simulators

Legacy Product Usage: Flex Max FM900, Flex Max FM340, Flex Max FM330, FlexNet 800, FlexNet 700, E900, E700

Notes:

1. Legacy C-COR, produced with and without a white plastic cover to protect components
2. Fits in the Flex Max330 with the cover removed



T-CS-*-Q Series Forward Cable Simulator

Product Usage: 12000-L-PBT, BTTF-*-Q, FFT-*-Q

Notes:

1. 1.2 GHz Taps
2. Blue plastic cover to protect components



Forward Path Equalizers

7-2E862/x-WC, 7-2E750/x-WC Forward Path Cable Equalizers

Product Usage: Flex Max FM601e-T/B/LE, Flex Max FM321e-LE

Legacy Product Usage: Flex Max FM601 Bridger & Line Extender, Flex Max FM321, Flex Max FM320, Diamond Line I & II, Opti Max OM1000

Notes:

1. Legacy Philips
2. Blue plastic cover to protect components



7-REF65/x-WC, 7-REF55/x-WC, 7-REF42/x-WC Cable Equalizers

Product Usage: Flex Max FM601e-T/B/LE, Flex Max FM321e-LE

Legacy Product Usage: Flex Max FM601 Bridger & Line Extender, Flex Max FM321, Flex Max FM320, Diamond Line I, II, & III, GNA/TNA, Opti Max OM1000

Notes:

1. Legacy Philips
2. Blue plastic cover to protect components



7-TG862-WC Linear Equalizers

Legacy Product Usage: Opti Max OM3000

Notes:

1. Legacy Philips
2. Blue plastic cover to protect components



CHP Plug-In Equalizers

Product Usage: CHP Dual TX

Notes:

1. Height is 0.6"
2. Molded white plastic



E606/xx Series Equalizers

Legacy Product Usage: Flex Max FM400, FM500

Notes:

1. Height is 1.4"
- 2.

Picture
N/A

E862xx Series Equalizers

Legacy Product Usage: Flex Max FM220Plus, FM400, FM500

Notes:

1. Height is 1.4"
- 2.

Picture
N/A

EQ21xx Series 870 MHz Linear Equalizers

Product Usage: NC2000, NC4000

Notes:

1. Height is 1.0"
2. Molded purple plastic



EQ21xxE Series 1.2 GHz Linear Equalizers

Product Usage: NC2000, NC4000

Notes:

1. Height is 1.0"
2. Molded pink plastic



EQ21xxG Series 1 GHz Linear Equalizers

Product Usage: NC2000, NC4000

Notes:

1. Height is 1.4"
2. Molded red plastic.



EQ41xx Series Equalizers

Legacy Product Usage: NC2000 1 GHz Series

Notes:

1. 0.834" x 0.703"
2. 45 to 870 MHz passband



EQ41xxG Series Equalizers

Legacy Product Usage: NC2000 1 GHz Series

Notes:

1. 0.834" x 0.703"
2. 45 to 1002 MHz passband



EQL-1220MHz-xx Series 1.2 GHz Linear Equalizers

Product Usage: OM4120, OM6000

Notes:

1. Height is 1.4"
2. Molded gray plastic



FEQC-750-xx Series Cable Equalizers

Legacy Product Usage: Flex Max FM401

Notes:

1. Height is 1.4"
2. Molded seagull green plastic



FEQC-870-xx Series Cable Equalizers

Legacy Product Usage: Flex Max FM401

Notes:

1. Height is 1.4"
2. Molded banana yellow plastic



FEQC-1G-xx Series Cable Equalizers

Legacy Product Usage: Flex Max FM401

Notes:

1. Height is 1.4"
2. Molded royal blue plastic



FLEQ Equalizers

Product Usage: VTN244

Notes:

1. Height is 1.3"
2. Molded navy blue plastic



GEQC-870-xxx Cable Equalizers

Product Usage: Flex Max FM901e-T (trunk only),

Legacy Product Usage: Opti Max OM2700

Notes:

1. Needed to configure for an 870MHz system in the Flex Max FM901e-T trunk amplifier
2. Height is 1.4"
3. Molded blue plastic



GEQC-1GHZ-xxx Cable Equalizers

Product Usage: Flex Max FM901e-T (trunk only), Opti Max OM2700

Legacy Product Usage: Opti Max OM2700

Notes:

1. Needed to configure for a 1 GHz system in the Flex Max FM901e-T trunk amplifier
2. Height is 1.4"
3. Molded brown plastic



GEQL-870-xxx Linear Equalizers

Product Usage: Opti Max OM4100, Opti Max OM2700, Opti Max OM2100, Opti Max OM4120, Opti Max OM6000

Notes:

1. Height is 1.4", symmetrical pin spacing
2. Molded purple plastic
3. Can be plugged into NPB or 10-A style sockets



GEQL-870-xxx-1 Linear Equalizers

Product Usage: Opti Max OM3101, Opti Max OM3100, Opti Max OM1111

Notes:

1. Height is 1.0", symmetrical pin spacing
2. Molded purple plastic
3. Can be plugged into NPB or 10-A style sockets



GEQL-1GHZ-xxx Linear Equalizers

Product Usage: Flex Max FM901e -T Trunk (O/P only), Opti Max OM4100, Opti Max OM2700, Opti Max OM2100, Opti Max OM4120, Opti Max OM6000

Notes:

1. Height is 1.4", symmetrical pin spacing
2. Molded red plastic
3. Can be plugged into NPB or 10-A style sockets
4. 1 GHz "red" EQs can be used for 870 MHz bandwidth if the losses are acceptable



GEQL-1GHZ-xxx-1 Linear Equalizers

Product Usage: Opti Max OM3101, Opti Max OM3100, Opti Max OM1111

Notes:

1. Height is 1.0", symmetrical pin spacing
2. Molded red plastic
3. Can be plugged into NPB or 10-A style sockets
4. 1 GHz "red" EQs can be used for 870 MHz bandwidth if the losses are acceptable



Ix7EQxx, Ix8EQxx Equalizers

Product Usage: Optiworx ISX3025, ISX3040

Notes:

- 1.

Picture
N/A

LME-87-* Linear Equalizers

Product Usage: SG4000

Legacy Product Usage: BTN2000, MBN100, MPN100, VSN200, SG1000

Notes:

- 1.

Picture
N/A

LME-100-* Linear Equalizers

Product Usage: SG4000

Legacy Product Usage: BTN2000, MBN100, MPN100, VSN200, SG1000

Notes:

- 1.



NEQL-870-xx Linear Equalizers

Legacy Product Usage: Opti Max OM4000

Notes:

1. Height is 1.4", non-symmetrical pin spacing
2. Molded yellow plastic



NLE31xx Equalizers

Legacy Product Usage: HLN3142, HLN3142E, HLN3144

Notes:

1. 0.9" x 0.8" x 0.9"

Picture
N/A

PEQ-1G-xx Cable Equalizers

Product Usage: Flex Max FM601e-T/B/LE, Flex Max FM321e-LE

Legacy Product Usage: Flex Max601 Bridger & Line Extender, Flex Max321

Note:

1. Blue plastic cover to protect components



SEQ750-xx Cable Equalizers

Product Usage: Flex Max FM901e-T/B, Flex Max FM331-LE, Opti Max OM2700

Legacy Product Usage: Flex Max901, Flex Max900, Flex Max340, Flex Max330, Flex Net800, Flex Net 700, E900, E700, LNSM7x

Notes:

1. Legacy C-COR, produced with and without a white plastic cover to protect components
2. Fits in the Flex Max FM331-LE, Flex Max901, and Flex Max330 with the cover removed



SEQ862-xx Cable Equalizers

Product Usage: Flex Max FM901e-T/B, Flex Max FM331-LE, Opti Max OM2700

Legacy Product Usage: Flex Max901, Flex Max900, Flex Max340, Flex Max330, Flex Net800, E900, E700

Notes:

1. Legacy C-COR, produced with and without a white plastic cover to protect components
2. Fits in the Flex Max FM331-LE, Flex Max901, and Flex Max330 with the cover removed



SEQ-1GHz-xx Cable Equalizers

Product Usage: Flex Max FM901e-T/B, Flex Max FM331-LE, Opti Max OM2700

Legacy Product Usage: Flex Max901

Note:

1. Cannot be plugged into Flex Max 900, Flex Max340, FlexMax330 or Legacy C-COR amps due to guide pins



SFE-100 Forward Cable Equalizers

Product Usage: BLE100, MB100, MBV3, BT100, SLE100

Note:

1. STARLINE amplifiers and FFE Series Equalizers
2. Blue plastic cover to protect components



SG2-FE-*/750, SG2-FE-*/870 Forward Cable Equalizers

Legacy Product Usage: SG2000

Note:

- 1.
2. Blue plastic cover to protect components

Picture
N/A

T-EQ-*-Q Series Forward Cable Equalizer

Product Usage: 12000-L-PBT, BTTF-*-Q, FFT-*-Q

Note:

1. 1.2 GHz Taps
2. Blue plastic cover to protect components



Forward Path Frequency Split Upgrade Plug-ins

42/54 MHz Diplex Filter (p/n 1504997)

Product Usage: Opti Max OM2741

Legacy Product Usage: Opti Max OM2700

Notes:

1. Included in OM27-42/54-DF-UPG-KIT upgrade kit (p/n 1510549-002)



85/102 MHz Diplex Filter (p/n 1508618)

Product Usage: Opti Max OM2741

Legacy Product Usage: Opti Max OM2700

Notes:

1. Included in OM27-85/102-DF-UPG-KIT upgrade kit (p/n 1510549-001)



1508883 Series Diplex Filters

Product Usage: Opti Max OM4120, OptiMax OM6000

Notes:

1. Available for 42/54, 65/85, 85/102, and 204/258 MHz splits
2. Included in 1510253 series frequency split upgrade kits



531355 Series Diplex Filters

Product Usage: SG4000, BT100, BLE100, SLE100, MB100, MBV3

Notes:

1. Available for 42/54, 65/85, and 85/102 MHz splits
2. SG4000 only: order with 555690-001, 555692-001, or 555694-001 Return Path Low-Pass Filters



54 MHz Forward Path Roll-Off Compensation Board (p/n 1508229-001)

Product Usage: Opti Max OM2741

Legacy Product Usage: Opti Max OM2700

Notes:

1. Included in OM27-85/102-DF-UPG-KIT upgrade kit (p/n 1510549-001)



102 MHz Forward Path Roll-Off Compensation Board (p/n 1508229-003)

Product Usage: Opti Max OM2741

Legacy Product Usage: Opti Max OM2700

Notes:

1. Included in OM27-85/102-DF-UPG-KIT upgrade kit (p/n 1510549-001)



530653 Series FSB Roll Off Compensation Board

Product Usage: SG4000

Notes:

1. For aligning the forward band when updating frequency splits



597696 Series Roll Off Compensation Board

Product Usage: Opti Max OM4120, Opti Max OM6000

Notes:

1. For aligning the forward band when updating frequency splits
2. Included in 1510253 series frequency split upgrade kits



RETURN PATH ACCESSORIES

Return Path Attenuator Pads

10-A-L and 10-A-WC Forward/Return Attenuators

Product Usage: 10-A-WC: Flex Max FM601e T/B/LE, Flex Max FM321e-LE, , OptiMax OM1111

Legacy Product Usage: 10-A-L: GNA/TNA; 10-A-WC: Flex Max FM601 Bridger & Line Extender, Flex Max FM321, Flex Max FM320, Diamond Line I, II, & III, Opti Max OM3000, Opti Max OM1000, OptiMax OM3101, OptiMax OM3100

Notes:

1. Height is 1.15", pin spacing is 0.125"
 2. 10-A-L: molded blue plastic without guide pins; 10-A-WC: molded blue plastic with guide pins
 3. 10-A-WC cannot be plugged into products using NPB or Amini PADs because of guide pins
 4. Same footprint as NPB and Amini PADs but may be limited by height constraints
- Zero value is possible exception due to performance



9-A-S Forward/Return Attenuators

Product Usage: CHP Max5000 Single TX

Legacy Product Usage: Opti Max3000 (RX only), Opti Max OM3100 (RX only)

Notes:

1. Height is 0.6", pin spacing is 0.125"
2. Molded blue plastic
3. Same footprint as Amini Short PADs but may be limited by height constraints
Zero value is possible exception due to performance



Amini Attenuators

Product Usage: Flex Max FM331-LE (interstage),

Legacy Product Usage: Flex Max FM222, Flex Max FM220 Plus, Flex Max FM220 Basic, Flex Max FM500, Flex Max FM400, Opti Max OM2000, Opti Max OM1220, Opti Max OM2100

Notes:

1. Height is 1.0", pin spacing is 0.125".
2. Molded orange plastic
3. Can be plugged into Legacy Philips products using 10-A-WC attenuators, but no guiding mechanism
4. Same footprint as NPB and 10-A attenuators but may be limited by height constraints



AP-40xx-L Series Forward/Return Path Attenuators

Product Usage: NC2000, NC4000

Notes:

1. Height is 1.0"
2. Molded orange plastic



JXP Forward/Return Path Attenuators

Product Usage: BLE100, MB100, MBV3, BT100, SLE100, SG4000, VSN

Note:

1. Height is 1.375", pin spacing is 0.125"
2. Molded blue plastic



IPADxxx Return Path Attenuators

Legacy Product Usage: Optiworx ISX3025, ISX3040

Picture
N/A

NPB Forward/Return Path Attenuators

Product Usage: Flex Max FM901e-T/B, Flex Max FM331-LE, Opti Max OM4100, Trans Max TM4100

Legacy Product Usage: Flex Max FM901, Flex Max FM330, Flex Max FM222, Flex Max FM401, Flex Max FM220 Plus, Flex Max FM220 Basic, Opti Max OM2700, Opti Max OM2100, Opti Max OM4000

Notes:

1. Height is 1.4", pin spacing is 0.125"
2. Molded green plastic
3. Same footprint as 10-A and Amini PADs but may be limited by height constraints



NPD38xx Forward/Return Path Attenuators

Legacy Product Usage: HLN3142, HLN3142E, HLN3144

Note:

1. 0.75 in. long
2. Molded yellow plastic.



RPB-xxx Return Attenuators

Legacy Product Usage: FlexNet 800, FlexNet 700, E900, E700

Notes:

1. Height is 1.10", pin spacing is 0.20"
2. Molded red plastic



SPB-xxx Forward/Return Attenuators

Legacy Product Usage: Flex Max900, Flex Max340, FlexNet 800, FlexNet 700, E900, E700, LN-SM7x

Notes:

1. Height is 1.10", pin spacing is 0.20"
2. Molded green plastic
3. SPB-0 can be used as a jumper in the distribution accessory location for a single output



T-RPA/*-* Series Return Path Attenuator Plug-in Modules

Product Usage: 12000-L-PBT, BTTF*-*Q, FFT*-*Q

Notes:

1. Height is 1.10", pin spacing is 0.20"
2. Molded green plastic
3. SPB-0 can be used as a jumper in the distribution accessory location for a single output

Return Path Equalizers

7-REF65/x-WC, 7-REF55/x-WC, 7-REF42/x-WC Cable Equalizers

Product Usage: Flex Max FM601e-T/B/LE, Flex Max FM321e-LE

Legacy Product Usage: Flex Max601 Bridger & Line Extender, Flex Max321, Flex Max320, Diamond Line I, II, & III, GNA/TNA, Opti Max1000

Notes:

1. Legacy Philips
2. Blue plastic cover to protect components



MEQ-42/MEQT-42, MEQ-55, MEQ-65, MEQ-85/MEQT-85 Cable Equalizers

Product Usage: Flex Max FM901e-T/B

Legacy Product Usage: Flex Max901 Trunk & Bridger, Flex Max900, Flex Max331, Flex Max340, Flex Net800, Flex Net700, E900, E700

Note:

1. White plastic cover to protect components



ES-NLE31xx Series 1 GHz Equalizer

Legacy Product Usage: HLN3842, HLN3844

Notes:

- 1.
- 2.



REQC-42, REQC-65, REQC-85 Return Cable Equalizers

Legacy Product Usage: Flex Max FM401

Notes:

1. Height is 1.4"
2. Molded light grey plastic



SRE Return Cable Equalizers

Product Usage: BLE100, MB100, MBV3, BT100, SLE100

Notes:

1. STARLINE amplifiers
2. Blue plastic cover to protect components



Return Path Frequency Split Upgrade Plug-ins

42/54 MHz Diplex Filter (p/n 1504997)

Product Usage: Opti Max OM2741

Legacy Product Usage: Opti Max OM2700

Notes:

1. Included in OM27-42/54-DF-UPG-KIT upgrade kit (p/n 1510549-002)



85/102 MHz Diplex Filter (p/n 1508618)

Product Usage: Opti Max OM2741

Legacy Product Usage: Opti Max OM2700

Notes:

1. Included in OM27-85/102-DF-UPG-KIT upgrade kit (p/n 1510549-001)



1508883 Series Diplex Filters

Product Usage: Opti Max OM4120, OptiMax OM6000

Notes:

1. Available for 42/54, 65/85, 85/102, and 204/258 MHz splits
2. Included in 1510253 series frequency split upgrade kits



531355 Series Diplex Filters

Product Usage: SG4000, BT100, BLE100, SLE100, MB100, MBV3

Notes:

1. Available for 42/54, 65/85, and 85/102 MHz splits
2. SG4000 only: order with 555690-001, 555692-001, or 555694-001 Return Path Low-Pass Filters



54 MHz Return Path Roll-Off Compensation Board (p/n 1506569-002)

Product Usage: Opti Max OM2741

Legacy Product Usage: Opti Max OM2700

Notes:

1. Included in OM27-42/54-DF-UPG-KIT upgrade kit (p/n 1510549-001)



102 MHz Return Path Roll-Off Compensation Board (p/n 1506569-004)

Product Usage: Opti Max OM2741

Legacy Product Usage: Opti Max OM2700

Notes:

1. Included in OM27-85/102-DF-UPG-KIT upgrade kit (p/n 1510549-001)



555690-001, 555692-001, 555694-001 Series Return Path Low Pass Filter

Product Usage: SG4000

Notes:

1. Available for 42/54, 65/85, and 85/102 MHz splits
2. Order with 531355 Series Diplex Filters

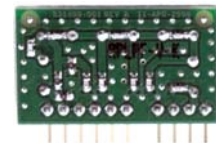


596605 Series Return Path Low Pass Filter (RPLPF)

Product Usage: Opti Max OM4120, Opti Max OM6000

Notes:

1. Included in 1510253 series frequency split upgrade kits



MISCELLANEOUS ACCESSORIES

7-DC-x-5-1000-WC Splitters and Directional Couplers (TAPs)

Product Usage: Flex Max FM601e-T/B

Legacy Product Usage: Flex Max FM601 Bridger, Flex Max FM222, Flex Max FM401, Diamond Line I & II, GNA/TNA, Opti Max OM1220, Opti Max OM2100, Opti Max OM3101

Note:

1. Blue cover to protect components and insertion guides



CM862/xx System Equalizer

Legacy Product Usage: Opti Max2000



D30/47, D42/54, D55/70, D65/85 Diplex Filters

Legacy Product Usage: Flex Max FM500, Flex Max FM400, Flex Max FM220 Plus, Opti Max OM2100, Opti Max OM2000, Opti Max OM1220,

Note:

1. Blue plastic cover to protect components



G120-* Series Plug-In Equalizer Board

Product Usage: FFE-*-120*/RP

Note:

1. STARLINE amplifiers
2. Directional Coupler and Splitter Plugin
3. Blue plastic cover to protect components



Ingress Noise Filter

Product Usage: Flex Max FM901e-T/B, Flex Max FM601e-T/B/LE

Legacy Product Usage: Flex Max901, Flex Max900, Flex Max601 Bridger & Line Extender, Flex Max222, Flex Max220 Basic, Flex Max220 Plus, FlexNet 800, FlexNet 700, Flex Max500, Flex Max400, Opti Max4000, Opti Max3000, Opti Max1000

Notes:

1. Height is 1.182", pin spacing is 0.125"
2. Accessory for return attenuator (PAD) plug-in locations
3. In some cases, the ingress filter may have to be inserted or removed with needlenose pliers



SP/DC-100 Distribution Accessories

Product Usage: MB100, SLE100

Note:

1. STARLINE amplifiers
2. Directional Coupler and Splitter Plugin
3. Blue plastic cover to protect components



SS/SDC-1000-xx Distribution Accessories

Product Usage: Flex Max FM901e-T/B,

Legacy Product Usage: Flex Max901, Flex Max 900, , FlexNet 700, FlexNet800, LN-SM3x, LN-SM7x, Opti Max OM2700

Note:

1. Legacy C-COR
2. White plastic cover to protect components



PADS (ATTENUATORS) SPECIFICATIONS

PADs provide flat loss attenuation of RF signal across the entire passband. They are used in conjunction with equalizers to achieve proper amplifier forward output levels and return input levels. These PADs also have a fixed insertion loss regardless of frequency. SEQPB series PADs are PADs on an equalizer footprint and only work in the forward path. Amini series attenuators can be used in cabinet-mount equipment as both an attenuator and an equalizer depending upon the plug-in location.



Table 11 9-A-S Series Forward/Return PAD Attenuators Specifications

Model	P/N	5–1002MHz Flat Loss (dB)	Passband Flatness (dB)	Model	P/N	5–1002MHz Flat Loss (dB)	Passband Flatness (dB)
9-A0-S	752501	0.0	±0.5	9-A11-S	752548	11.0	±0.2
9-A1-S	752509	1.0	±0.2	9-A12-S	752550	12.0	±0.2
9-A2-S	752515	2.0	±0.2	9-A13-S	752554	13.0	±0.2
9-A3-S	752520	3.0	±0.2	9-A14-S	752558	14.0	±0.2
9-A4-S	752523	4.0	±0.2	9-A15-S	752561	15.0	±0.2
9-A5-S	752526	5.0	±0.2	9-A16-S	752564	16.0	±0.2
9-A6-S	752529	6.0	±0.2	9-A17-S	752566	17.0	±0.2
9-A7-S	752533	7.0	±0.2	9-A18-S	752568	18.0	±0.2
9-A8-S	752537	8.0	±0.2	9-A19-S	752571	19.0	±0.2
9-A9-S	752541	9.0	±0.2	9-A-TERM-S	752587	terminator	—
9-A10-S	752545	10.0	±0.2				
Return Loss I/O @ 1000MHz: 20/20dB min.				Specification Document Number 871371			



Table 12 10-A-L/10-A-WC Series Forward/Return PAD Attenuators Specifications

Model	P/N	5–1002MHz Flat Loss (dB)	Passband Flatness (dB)	Model	P/N	5–1002MHz Flat Loss (dB)	Passband Flatness (dB)
10-A0.0-L	725816	0.0	±0.5	10-A0.0-WC	725464	0.0	±0.5
10-A1.0-L	726034	1.0	±0.1	10-A1.0-WC	725467	1.0	±0.1
10-A2.0-L	725852	2.0	±0.2	10-A2.0-WC	725463	2.0	±0.2
10-A3.0-L	725897	3.0	±0.2	10-A3.0-WC	725465	3.0	±0.2
10-A4.0-L	725832	4.0	±0.2	10-A4.0-WC	725468	4.0	±0.2
10-A5.0-L	725864	5.0	±0.2	10-A5.0-WC	725469	5.0	±0.2
10-A6.0-L	725964	6.0	±0.2	10-A6.0-WC	725466	6.0	±0.2
10-A7.0-L	725975	7.0	±0.2	10-A7.0-WC	725470	7.0	±0.2
10-A8.0-L	725880	8.0	±0.2	10-A8.0-WC	725667	8.0	±0.2
10-A9.0-L	725939	9.0	±0.2	10-A9.0-WC	725657	9.0	±0.2
10-A10.0-L	725901	10.0	±0.2	10-A10.0-WC	726033	10.0	±0.2
10-A11.0-L	725900	11.0	±0.2	10-A11.0-WC	725658	11.0	±0.2
10-A12.0-L	725881	12.0	±0.2	10-A12.0-WC	725659	12.0	±0.2
10-A13.0-L	725881	13.0	±0.2	10-A13.0-WC	725660	13.0	±0.2
10-A14.0-L	726036	14.0	±0.2	10-A14.0-WC	725661	14.0	±0.2
10-A15.0-L	726037	15.0	±0.2	10-A15.0-WC	725662	15.0	±0.2



Table 12 10-A-L/10-A-WC Series Forward/Return PAD Attenuators Specifications

(cont'd)

Model	P/N	5–1002 MHz Flat Loss (dB)	Passband Flatness (dB)	Model	P/N	5–1002 MHz Flat Loss (dB)	Passband Flatness (dB)
10-A16.0-L	726038	16.0	±0.2	10-A16.0-WC	725663	16.0	±0.2
10-A17.0-L	726039	17.0	±0.2	10-A17.0-WC	725664	17.0	±0.2
10-A18.0-L	726040	18.0	±0.2	10-A18.0-WC	725665	18.0	±0.2
10-A19.0-L	726041	19.0	±0.2	10-A19.0-WC	725666	19.0	±0.2
10-A20.0-L	725436	20.0	±0.2	10-A20.0-WC	725461	20.0	±0.2
10-A21.0-L	725321	21.0	±0.2	10-A21.0-WC	725825	21.0	±0.2
10-A22.0-L	725490	22.0	±0.2	10-A22.0-WC	725962	22.0	±0.2
10-A23.0-L	725755	23.0	±0.2	10-A23.0-WC	725860	23.0	±0.2
10-A24.0-L	726042	24.0	±0.2	10-A24.0-WC	725830	24.0	±0.2
10-A25.0-L	725328	25.0	±0.2	10-A25.0-WC	726043	25.0	±0.2
10-A26.0-L	725644	26.0	±0.2	10-A26.0-WC	726044	26.0	±0.2
				10-A-TERM-WC		terminator	—
Return Loss I/O @ 1000MHz: 20/20 dB min.				Specification Document Number 871371			



Table 13 Amini PAD Attenuators Specifications

Model	P/N	Atten. 5–862 MHz Flat Loss in dB	Forward Path EQ, 65/85 MHz Insertion Loss in dB at Frequency (MHz)		EQ Value in dB	Return Path EQ, 65/85 MHz Insertion Loss in dB at Frequency (MHz)		EQ Value in dB
			85	862		5	65	
Amini-0	724428	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amini-1	724423	1.0	.98	.23	.75	.99	.03	.96
Amini-2	724558	2.0	1.92	.40	1.52	1.97	.04	1.93
Amini-3	724601	3.0	2.87	.51	2.36	2.94	.06	2.88
Amini-4	724632	4.0	4.06	.56	3.50	4.16	.08	4.08
Amini-5	724680	5.0	4.81	.59	4.22	4.90	.09	4.81
Amini-6	724627	6.0	5.82	.62	5.20	5.95	.10	5.85
Amini-7	724697	7.0	6.67	.62	6.05	6.84	.11	6.73
Amini-8	724689	8.0	7.67	.62	7.05	7.83	.12	7.71
Amini-9	724766	9.0	8.58	.60	7.98	8.80	.13	8.67
Amini-10	724769	10.0	9.49	.59	8.90	9.73	.14	9.59
Amini-11	724841	11.0	10.40	.60	9.80	10.68	.14	10.54
Amini-12	724800	12.0	11.34	.58	10.76	11.61	.15	11.46
Amini-13	724925	13.0	12.26	.56	11.70	12.57	.15	12.42
Amini-14	724865	14.0	13.11	.55	12.56	13.42	.16	13.26
Amini-15	724889	15.0	13.99	.55	13.44	14.30	.16	14.14
Amini-16	724906	16.0	14.88	.61	14.27	15.18	.17	15.01
Amini-17	725037	17.0	—	—	—	—	—	—
Amini-18	724943	18.0	—	—	—	—	—	—
Amini-19	724996	19.0	—	—	—	—	—	—
Amini-20	724957	20.0	—	—	—	—	—	—
Amini plug-ins can be used as both PADs and EQs in the Forward Path in the FM220 Basic and FM222 Amplifiers. All in orange plastic.								

Table 14 Amini Short PAD Attenuators Specifications



P/N	PAD Value	P/N	PAD Value	P/N	PAD Value	P/N	PAD Value
725258	0.0	725455	6.0	724672	12.0	725919	18.0
725982	0.5	725972	6.5	726150	12.5	725857	18.5
725983	1.0	725990	7.0	724734	13.0	725976	19.0
725828	1.5	725991	7.5	725940	13.5	725804	19.5
725984	2.0	725020	8.0	724760	14.0	725956	20.0
725826	2.5	725992	8.5	725923	14.5	725859	20.5
725985	3.0	724802	9.0	724693	15.0	725902	21.0
725986	3.5	725936	9.5	725840	15.5	725935	21.5
725987	4.0	724615	10.0	725906	16.0	725915	22.0
725931	4.5	725993	10.5	725961	16.5	725916	22.5
725988	5.0	724678	11.0	725812	17.0	725894	23.0
725989	5.5	725783	11.5	725819	17.5		

Amini Shorts are used in the CHP Max5000 Dual Input Transmitter and should be inserted with needle-nose pliers.
All in orange plastic.

Table 15 AP40xx Series Forward/Return Path PAD Attenuators Specifications



Model/ Part Number	dB Value (±0.3 dB)		Model	dB Value (±0.3 dB)
AP4000-L	0.0		AP4011-L	11.0
AP4001-L	1.0		AP4012-L	12.0
AP4002-L	2.0		AP4013-L	13.0
AP4003-L	3.0		AP4014-L	14.0
AP4004-L	4.0		AP4015-L	15.0
AP4005-L	5.0		AP4016-L	16.0
AP4006-L	6.0		AP4017-L	17.0
AP4007-L	7.0		AP4018-L	18.0
AP4008-L	8.0		AP-4075	75 ohm termination
AP4009-L	9.0			
AP4010-L	10.0			

Frequency Range: 5 to 1200 MHz
Impedance: 75 ohm
Return Loss: 20 dB (min.)
All in orange plastic.

Table 16 Bridge and A862 Attenuators Specifications



Model	P/N	PAD Value	Flatloss 5–862 MHz	Passband Flatness
Bridge (A862/0)	724739	0	0	±0.15dB
A862/02	725444	2	2	±0.15dB
A862/04	725672	4	4	±0.15dB



Table 16 Bridge and A862 Attenuators Specifications

A862/05	778925	5	5	±0.15dB
A862/06	725218	6	6	±0.15dB
A862/08	725641	8	8	±0.15dB
A862/10	725868	10	10	±0.15dB
Dimensions, L x H: 30 x 37.7mm. All in blue plastic.				



Table 17 JXP Series Forward/Return PAD Attenuators Specifications

Model	Part Number	5-1000 MHz Flat Loss	Passband Flatness	Model	Part Number	5-1000 MHz Flat Loss	Passband Flatness
JXP-0B-R	531186-001-00	0	±0.5dB	JXP-14B-R	531186-015-00	14	±0.5dB
JXP-1B-R	531186-002-00	1	±0.5dB	JXP-15B-R	531186-016-00	15	±0.5dB
JXP-2B-R	531186-003-00	2	±0.5dB	JXP-16B-R	531186-017-00	16	±0.5dB
JXP-3B-R	531186-004-00	3	±0.5dB	JXP-17B-R	531186-018-00	17	±0.5dB
JXP-4B-R	531186-005-00	4	±0.5dB	JXP-18B-R	531186-019-00	18	±0.5dB
JXP-5B-R	531186-006-00	5	±0.5dB	JXP-19B-R	531186-020-00	19	±0.5dB
JXP-6B-R	531186-007-00	6	±0.5dB	JXP-20B-R	531186-021-00	20	±0.5dB
JXP-7B-R	531186-008-00	7	±0.5dB	JXP-21B-R	531186-022-00	21	±0.5dB
JXP-8B-R	531186-009-00	8	±0.5dB	JXP-22B-R	531186-023-00	22	±0.5dB
JXP-9B-R	531186-010-00	9	±0.5dB	JXP-23B-R	531186-024-00	23	±0.5dB
JXP-10B-R	531186-011-00	10	±0.5dB	JXP-24B-R	531186-025-00	24	±0.5dB
JXP-11B-R	531186-012-00	11	±0.5dB	JXP-25B-R	531186-026-00	25	±0.5dB
JXP-12B-R	531186-013-00	12	±0.5dB	JXP-26B-R	531186-027-00	26	±0.5dB
JXP-13B-R	531186-014-00	13	±0.5dB				



Table 18 NPB Series Forward/Return Path PAD Attenuators Specifications

Model/Part Number	5-1200 MHz Flat Loss (dB)	Passband Flatness (dB)
NPB-000	0.0	±0.15
NPB-005	0.5	±0.15
NPB-010	1.0	±0.15
NPB-015	1.5	±0.15
NPB-020	2.0	±0.15
NPB-025	2.5	±0.15
NPB-030	3.0	±0.15
NPB-035	3.5	±0.15
NPB-040	4.0	±0.15

Table 18 NPB Series Forward/Return Path PAD Attenuators Specifications



(cont'd)

Model/Part Number	5–1200 MHz Flat Loss (dB)	Passband Flatness (dB)
NPB-045	4.5	±0.15
NPB-050	5.0	±0.15
NPB-060	6.0	±0.15
NPB-070	7.0	±0.15
NPB-080	8.0	±0.15
NPB-090	9.0	±0.15
NPB-100	10.0	±0.15
NPB-110	11.0	±0.15
NPB-120	12.0	±0.15
NPB-130	13.0	±0.15
NPB-140	14.0	±0.15
NPB-150	15.0	±0.15
NPB-160	16.0	±0.15
NPB-170	17.0	±0.15
NPB-180	18.0	±0.15
NPB-190	19.0	±0.15
NPB-200	20.0	±0.15
NPB-750	terminator	N/A
Flatness measured relative to a straight line at the listed dB value. Return Loss: 20 dB (5–1003 MHz); 25 dB (5–1250 MHz) Impedance: 75 ohm Temperature Range: –40°C to 85°C (–40°F to 185°F) All in green plastic.		



Table 19 NPD38xx Series Forward/Return Path PAD Attenuators Specifications

Model/Part Number	5–1002 MHz Flat Loss (dB)		Model/Part Number	5–1002 MHz Flat Loss (dB)
NPD3806	6		NPD3814	14
NPD3807	7		NPD3815	15
NPD3808	8		NPD3816	16
NPD3809	9		NPD3817	17
NPD3810	10		NPD3818	18
NPD3811	11		NPD3819	19
NPD3812	12		NPD3820	20
NPD3813	13		NPD3875	Terminator

Table 20 RPB Series Return PAD Attenuators (reverse SPB-style PAD) Specifications



Model	P/N	5–200MHz Flat Loss (dB)	Model	P/N	5–200MHz Flat Loss (dB)
RPB-21	726092	21.0	RPB-24	762237	24.0
RPB-22	762235	22.0	RPB-25	762238	25.0
RPB-23	762236	23.0'			
Passband Flatness: ± 0.3 dB Return Loss I/O: 25/25dB min. All in red plastic.			Specification Document Number 600701		

Table 21 SEQPB Series EQ Form Factor PAD Attenuators Specifications



Model	P/N	5–1002MHz Flat Loss (dB)	Model	P/N	5–1002MHz Flat Loss (dB)
SEQPB-1000-01	725614	1.0	SEQPB-1000-06	762137	6.0
SEQPB-1000-02	762134	2.0	SEQPB-1000-07	762138	7.0
SEQPB-1000-03	762135	3.0	SEQPB-1000-08	726084	8.0
SEQPB-1000-04	762136	4.0	SEQPB-1000-09	726085	9.0
SEQPB-1000-05	726083	5.0	SEQPB-1000-10	762139	10.0
Passband Flatness: ± 0.3 dB Return Loss I/O: 19/19dB min. (SEQPB-01 to 06) 18.5/18.5dB min. (SEQPB-07 to 010) Slope: -0.2 to -0.7 dB			Specification Document Number 600668		

Table 22 SPB Series Forward/Return PAD Attenuators Specifications



Model	P/N	5–1002MHz Flat Loss (dB)	Model	P/N	5–1002MHz Flat Loss (dB)	Model	P/N	5–1000MHz Flat Loss (dB)
SPB-0	162260-00	0.0	SPB-7	162260-07	7.0	SPB-14	162260-14	14.0
SPB-0.5	162260-005	0.5	SPB-7.5	162260-075	7.5	SPB-14.5	162260-145	14.5
SPB-1	162260-01	1.0	SPB-8	162260-08	8.0	SPB-15	162260-15	15.0
SPB-1.5	162260-015	1.5	SPB-8.5	162260-085	8.5	SPB-15.5	162260-155	15.5
SPB-2	162260-02	2.0	SPB-9	162260-09	9.0	SPB-16	162260-16	16.0
SPB-2.5	162260-025	2.5	SPB-9.5	162260-095	9.5	SPB-16.5	162260-165	16.5
SPB-3	162260-03	3.0	SPB-10	162260-10	10.0	SPB-17	162260-17	17.0
SPB-3.5	162260-035	3.5	SPB-10.5	162260-105	10.5	SPB-17.5	162260-175	17.5
SPB-4	162260-04	4.0	SPB-11	162260-11	11.0	SPB-18	162260-18	18.0
SPB-4.5	162260-045	4.5	SPB-11.5	162260-115	11.5	SPB-18.5	162260-185	18.5
SPB-5	162260-05	5.0	SPB-12	162260-12	12.0	SPB-19	162260-19	19.0
SPB-5.5	162260-055	5.5	SPB-12.5	162260-125	12.5	SPB-19.5	162260-195	19.5
SPB-6	162260-06	6.0	SPB-13	162260-13	13.0	SPB-20	162260-20	20.0
Passband Flatness: ± 0.3 dB Return Loss I/O: 19/19dB min. All in green plastic.						Specification Document Number 600437		

Table 22 SPB Series Forward/Return PAD Attenuators Specifications



Model	P/N	5–1002MHz Flat Loss (dB)	Model	P/N	5–1002MHz Flat Loss (dB)	Model	P/N	5–1000MHz Flat Loss (dB)
SPB-6.5	162260-065	6.5	SPB-13.5	162260-135	13.5			
Passband Flatness: ± 0.3 dB Return Loss I/O: 19/19dB min. All in green plastic.						Specification Document Number 600437		

Table 23 Thermal PAD Attenuators Specifications



P/N	PAD Value	P/N	PAD Value
753116	3dB	797584 (w/o cover)	3dB
Passband Flatness: ± 0.25 dB Return Loss I/O: 17/17dB min. Insertion Loss@1002 MHz: -3.20 ± 0.25 dB Covers are all in blue plastic.			
Specification Document Number 1503649			

Table 24 T-RPA/*-* Series Return Path Attenuator Plug-in Modules Specifications

Specification	Freq (MHz)	T-RPA/42-2	T-RPA/42-4	T-RPA/42-6	T-RPA/42-8	T-RPA/42-10	T-RPA/42-12	T-RPA/42-14	T-RPA/42-16	T-RPA/42-18
Return Attenuation (dB nominal)	5–42	2.5	4.5	6.5	8.5	10.5	12.5	14.5	16.5	18.5
Tolerance ($\pm$ dB max.)	5–30	1.0	1.0	1.0	1.0	1.0	1.4	1.6	1.6	2.1
	31–42	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.5	2.5
Drop Insertion Loss¹ (dB max.)	54	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	300	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	550	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	750	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	870	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	1000	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	1218	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

¹The insertion loss specifications shown are in addition to the nominal tap value loss.

Specification	Freq (MHz)	T-RPA/85-2	T-RPA/85-4	T-RPA/85-6	T-RPA/85-8	T-RPA/85-10	T-RPA/85-12	T-RPA/85-14	T-RPA/85-16	T-RPA/85-18
Return Attenuation (dB nominal)	5–85	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0
Tolerance ($\pm$ dB max.)	5–50	1.5	1.5	1.5	1.5	1.5	1.5	1.8	2.0	2.0
	51–80	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Drop Insertion Loss¹ (dB max.)	104	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	106	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	300	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	550	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	750	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	870	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	1000	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	1218	1.0	1.0	1.0	1.0	1.0	1.2	1.2	1.2	1.2

¹The insertion loss specifications shown are in addition to the nominal tap value loss.

NOISE FILTER SPECIFICATIONS

The Return Ingress Noise Filter is an ARRIS RF accessory for return attenuator (PAD) plug-in locations. This accessory not only suppresses signals below 10MHz with at least 30dB of attenuation but also passes signals above 15MHz with minimal insertion loss. Ingress noise represents one of the major disturbances that affect upstream data transmission in broadband networks. This high pass filter prevents narrowband AM modulation carriers, such as short-wave radio signals, and any other interference from being introduced into the return path via an external source. Managing ingress noise in the return plant is crucial for data carrier performance, especially in broadband networks in which the return path is increasingly used for advanced services including video on demand and voice over IP. The ARRIS Return Ingress Noise Filter is a small, simple, yet vital component for implementing these services.



Table 25 Return Ingress Noise Filter 15 MHz (P/N 724577) Specifications

Characteristic	Specification
RF impedance, Ω	75
Bandwidth, MHz	15–200
Insertion Loss, dB	
15–20MHz	< 1.50
20–200MHz	< 1.00
Return Loss, dB min.	≤ -18
Stop Band	
Bandwidth, MHz	5–10
Attenuation, dB	≥ 30
Physical and Environmental Characteristics	
Dimensions (w x h x d), mm	11 x 30 x 5
Connector	3 pin plug-in
Temperature, $^{\circ}\text{C}$	–40 to 85
Humidity, % Relative Humidity	5–95
In some cases, the ingress filter may have to be inserted or removed with needlenose pliers.	Specification Document Number KR012940

Table 26 FM401 Return Ingress Noise Filter 15 MHz (P/N 789307) Specifications

Characteristic	Specification
RF impedance, Ω	75
Bandwidth, MHz	15–200
Insertion Loss, dB	
15–20MHz	< 1.50
20–200MHz	< 1.00
Return Loss, dB min.	≤ -18
Stop Band	
Bandwidth, MHz	5–10
Attenuation, dB	≥ 30
In some cases, the ingress filter may have to be inserted or removed with needlenose pliers.	Specification Document Number 1505819

PLUG-IN EQUALIZERS SPECIFICATIONS

Plug-in equalizers are available as either linear equalizers or cable equalizers, both of which provide attenuation of RF signals with the greatest attenuation occurring at the lowest rated frequency. Linear equalizers provide linear attenuation, while cable equalizers provide sloped attenuation. EQLs, EQ21xxEs, GEQLs, EQ21xxGs, EQ21xxs, NEQLs, and 7-TG862-WCs are linear equalizers. SEQs, 7-2E862/x-WCs, MEQs, MEQTs, and T-EQ-*s are cable equalizers. Equalizers are available as both fixed (GEQL, NEQL, SEQ, 7-TG-862-WC, and 7-2E862/x-WC, and MEQ series) or thermal (MEQT series). All except the MEQ and MEQT series provide equalization in the forward path. Thermal equalizers provide level control in addition to equalization by slope-compensated insertion loss that changes with temperature for the amount of cable equalized.



Table 27 1GHz Equalizer for CHP Max™ Headend Optics Platform Specifications

Model	P/N	Value
1300847	758805	0
861020	725106	0.5
861022	725107	1.0
861024	725000	1.5
1500944	725291	3.0



Table 28 7-2E862/x-WC Forward Path Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)							
		54	70	85	450	550	650	750	870
7-2E862/1-WC	2500808	1.3	1.2	1.2	0.8	0.7	0.6	0.6	0.5
7-2E862/2-WC	2500809	2.0	2.0	1.9	1.1	0.9	0.8	0.7	0.5
7-2E862/3-WC	2500810	2.8	2.7	2.6	1.4	1.2	0.9	0.7	0.5
7-2E862/4-WC	2500811	3.6	3.5	3.4	1.7	1.4	1.1	0.8	0.5
7-2E862/5-WC	2500812	4.4	4.2	4.1	2.0	1.6	1.2	0.9	0.5
7-2E862/6-WC	2500813	5.1	5.0	4.8	2.3	1.8	1.4	1.0	0.5
7-2E862/7-WC	2500814	5.9	5.7	5.5	2.6	2.1	1.5	1.0	0.5
7-2E862/8-WC	2500815	6.7	6.4	6.2	2.9	2.3	1.7	1.1	0.5
7-2E862/9-WC	2500816	7.4	7.2	6.9	3.2	2.5	1.8	1.2	0.5
7-2E862/10-WC	2500817	8.2	7.9	7.6	3.5	2.7	2.0	1.3	0.4
7-2E862/11-WC	2500818	9.0	8.7	8.4	3.8	2.9	2.1	1.3	0.4
7-2E862/12-WC	2500819	9.8	9.4	9.1	4.1	3.2	2.3	1.4	0.4
7-2E862/13-WC	2500820	10.5	10.1	9.8	4.4	3.4	2.4	1.5	0.4
7-2E862/14-WC	2500821	11.3	10.9	10.5	4.8	3.6	2.6	1.6	0.4
7-2E862/15-WC	2500822	12.1	11.6	11.2	5.1	3.8	2.7	1.6	0.4
7-2E862/16-WC	2500823	13.1	12.6	12.2	5.6	4.3	3.1	2.0	0.7
7-2E862/17-WC	2500824	13.9	13.4	12.9	5.9	4.5	3.2	2.0	0.7
7-2E862/18-WC	2500825	14.6	14.1	13.6	6.2	4.8	3.4	2.1	0.7
7-2E862/19-WC	2500981	15.4	14.8	14.3	6.5	5.0	3.5	2.2	0.7
7-2E862/20-WC	2500978	16.2	15.6	15.0	6.8	5.2	3.7	2.3	0.6
7-2E862/21-WC	2500982	17.0	16.3	15.7	7.1	5.4	3.8	2.3	0.6
7-2E862/22-WC	2500983	17.7	17.1	16.5	7.4	5.6	4.0	2.4	0.6



Table 28 7-2E862/x-WC Forward Path Cable Equalizers Specifications

(cont'd)

Model	P/N	Insertion Loss in dB at Frequency (MHz)							
		54	70	85	450	550	650	750	870
7-2E862/23-WC	2500979	18.5	17.8	17.2	7.7	5.9	4.1	2.5	0.6
7-2E862/24-WC	2500984	19.3	18.6	17.9	8.0	6.1	4.3	2.6	0.6
7-2E862/25-WC	2500985	20.1	19.3	18.6	8.3	6.3	4.4	2.6	0.6
7-2E862/26-WC	2500980	20.8	20.0	19.3	8.6	6.5	4.6	2.7	0.6



Table 29 7-REF42/x-WC Return Cable Equalizers Specifications

Model	P/N	PAD Value	Insertion Loss in dB at Frequency (MHz)						
			5	7	13	19	25	33	42
7-REF42/1-WC	724826	1	1.4	1.3	1.1	1.0	0.9	0.8	0.7
7-REF42/2-WC	724727	2	1.8	1.7	1.4	1.1	1.0	0.8	0.7
7-REF42/3-WC	724897	3	2.6	2.4	2.0	1.6	1.4	1.0	0.7
7-REF42/4-WC	724819	4	3.4	3.1	2.6	2.2	1.7	1.2	0.7
7-REF42/5-WC	724951	5	4.1	3.7	3.1	2.5	2.0	1.4	0.7
7-REF42/6-WC	724872	6	4.6	4.1	3.4	2.7	2.2	1.3	0.7
7-REF42/7-WC	724866	7	5.3	5.0	4.0	3.2	2.4	1.5	0.7
7-REF42/8-WC	724881	8	6.0	5.4	4.2	3.5	2.6	1.6	0.7
7-REF42/9-WC	725029	9	6.6	5.8	4.7	3.7	2.7	1.7	0.7

All in blue plastic.



Table 30 7-REF55/x-WC Return Cable Equalizers Specifications

Model	P/N	PAD Value	Insertion Loss in dB at Frequency (MHz)								
			5	7	13	19	25	33	42	49	55
7-REF55/1-WC	762590	1	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.5	0.4
7-REF55/2-WC	762591	2	1.8	1.7	1.5	1.3	0.9	0.7	0.6	0.5	0.4
7-REF55/3-WC	762592	3	2.3	2.2	1.8	1.5	1.3	0.9	0.6	0.3	0.4
7-REF55/4-WC	762593	4	3.3	3.0	2.6	2.2	1.8	1.4	1.0	0.8	0.5
7-REF55/5-WC	762594	5	4.1	3.8	3.2	2.7	2.2	1.7	1.2	0.9	0.5
7-REF55/6-WC	762595	6	4.8	4.4	3.7	3.0	2.5	2.0	1.3	0.9	0.5
7-REF55/7-WC	762596	7	5.2	4.8	3.9	3.2	2.7	2.1	1.4	1.0	0.5
7-REF55/8-WC	762597	8	6.2	5.7	4.7	4.0	3.2	2.4	1.6	1.0	0.6
7-REF55/9-WC	762598	9	6.9	6.3	5.3	4.4	3.5	2.7	1.8	1.3	0.6
7-REF55/10-WC	762599	10	7.6	7.0	5.7	4.8	3.7	2.9	1.9	1.3	0.6

All in blue plastic.



Table 31 7-REF65/x-WC Return Cable Equalizers Specifications

Model	P/N	PAD Value	Insertion Loss in dB at Frequency (MHz)								
			5	8	20	29	36	42	56	63	65
7-REF65/1-WC	725750	1	1.3	1.2	1.0	0.9	0.8	0.7	0.6	0.6	0.6
7-REF65/2-WC	725785	2	2.1	1.9	1.5	1.3	1.2	1.0	0.7	0.7	0.6
7-REF65/3-WC	726028	3	2.7	2.5	2.2	1.9	1.5	1.1	0.7	0.7	0.6
7-REF65/4-WC	725677	4	3.5	3.2	2.7	2.4	1.9	1.3	0.8	0.7	0.6
7-REF65/5-WC	762600	5	4.2	3.8	3.2	2.5	2.1	1.5	0.9	0.7	0.6
7-REF65/6-WC	726029	6	4.8	4.1	3.2	2.8	2.2	1.6	1.1	0.7	0.6
7-REF65/7-WC	726030	7	5.8	5.3	3.9	3.0	2.5	2.1	1.3	0.9	0.6
7-REF65/8-WC	726031	8	6.5	5.8	4.2	3.6	2.7	2.2	1.3	1.0	0.6
7-REF65/9-WC	762601	9	6.9	6.2	5.0	3.8	3.0	2.2	1.4	1.0	0.6
7-REF65/10-WC	762602	10	8.0	7.1	5.2	1.0	3.2	2.7	1.5	1.0	0.6
7-REF65/11-WC	762603	11	8.6	7.9	5.6	4.4	3.4	2.8	1.5	1.0	0.6

All in blue plastic.



Table 32 7-REF85/x-WC Return Cable Equalizers Specifications

Model	P/N	PAD Value	Insertion Loss in dB at Frequency (MHz)								
			5	8	20	29	36	42	56	63	65
7-REF85/1-WC	787588	1	1.3	1.2	1.0	0.9	0.8	0.7	0.6	0.6	0.6
7-REF85/2-WC	787589	2	2.1	1.9	1.5	1.3	1.2	1.0	0.7	0.7	0.6
7-REF85/3-WC	787590	3	2.7	2.5	2.2	1.9	1.5	1.1	0.7	0.7	0.6
7-REF85/4-WC	787591	4	3.5	3.2	2.7	2.4	1.9	1.3	0.8	0.7	0.6
7-REF85/5-WC	787592	5	4.2	3.8	3.2	2.5	2.1	1.5	0.9	0.7	0.6
7-REF85/6-WC	787593	6	4.8	4.1	3.2	2.8	2.2	1.6	1.1	0.7	0.6
7-REF85/7-WC	787594	7	5.8	5.3	3.9	3.0	2.5	2.1	1.3	0.9	0.6
7-REF85/8-WC	787595	8	6.5	5.8	4.2	3.6	2.7	2.2	1.3	1.0	0.6

All in blue plastic.



Table 33 7-TG862-WC Series Linear Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)		Tilt in dB
		50	862	45 to 890MHz
7-TG862/5-WC	724909	5.0	1.0	5.20
7-TG862/6-WC	725727	6.0	1.0	6.24
7-TG862/7-WC	725457	7.0	1.0	7.28
7-TG862/8-WC	725410	8.0	1.0	8.33
7-TG862/9-WC	725575	9.0	1.0	9.37
7-TG862/10-WC	725575	10.0	1.0	10.41

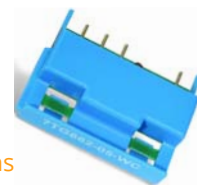


Table 33 7-TG862-WC Series Linear Equalizers Specifications

(cont'd)

Model	P/N	Insertion Loss in dB at Frequency (MHz)		Tilt in dB
		50	862	45 to 890MHz
7-TG862/11-WC	725605	11.0	1.0	11.45
7-TG862/12-WC	725515	12.0	1.0	12.49
7-TG862/13-WC	725476	11.0	1.0	13.52
7-TG862/14-WC	725737	12.0	1.0	14.57
7-TG862/15-WC	725820	11.0	1.0	15.61
Passband Flatness: ± 0.2 dB Return loss I/O: 18/18dB min.			Specification Document Number 871539	

Picture

N/A

Table 34 CBSM-1GHz Series Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)										
		47	100	200	300	400	500	600	700	800	900	1000
CBSM-1G-03	728226	0.80	1.04	1.36	1.61	1.83	3.02	2.19	2.36	2.51	2.66	2.80
CBSM-1G-05	728227	0.80	1.28	1.92	2.42	2.85	3.24	3.59	3.92	4.22	4.52	4.80
CBSM-1G-07	728228	0.80	1.51	2.48	3.23	3.88	4.45	4.98	5.47	5.94	6.37	6.80
CBSM-1G-09	728229	0.80	1.75	3.03	4.04	4.90	5.67	6.38	7.03	7.65	8.23	8.80
Return Loss I/O: 22/22dB min. Tolerance: ± 0.3 dB				Specification Document Number 1505004								

Picture

N/A

Table 35 E606 Series Cable Equalizer Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)		
		PAD Value	47	606
PH0.42171	725829	2	2	1
PH0.42161	725912	4	4	1
PH0.42151	725836	6	6	1
PH0.41052	725898	8	8	1
PH0.41062	725872	10	10	1
PH0.41072	725945	12	12	1
PH0.41082	725834	14	14	1
PH0.41092	725879	16	16	1
Passband Flatness: ± 0.2 dB Return Loss: <20dB (47MHz)–1.5dB/oct. Dimensions in L x H: 30 x 37.7mm All in blue plastic.				



Table 36 E862 Series Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)	
		47	862
E862/02	724767	2	1
E862/04	724862	4	1
E862/06	724718	6	1
E862/08	724580	8	1
E862/10	724993	10	1
E862/12	725063	12	1
E862/14	725122	14	1
E862/16	725227	16	1
Passband Flatness: ± 0.2 dB Return Loss: <20dB (47MHz)–1.5dB/oct.			



Table 37 EQ21xx Series Linear Equalizers Specifications

Model	Insertion Loss in dB at Frequency (MHz)										
	45	70	80	100	300	400	500	600	700	800	870
EQ2100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EQ2102	2.0	2.0	2.0	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1.0
EQ2103	3.0	2.9	2.9	2.9	2.4	2.1	1.9	1.7	1.4	1.2	1.0
EQ2104	4.0	3.9	3.9	3.8	3.1	2.7	2.3	2.0	1.6	1.3	1.0
EQ2105	5.0	4.9	4.8	4.7	3.8	3.3	2.8	2.3	1.8	1.3	1.0
EQ2106	6.0	5.8	5.8	5.7	4.5	3.8	3.2	2.6	2.0	1.4	1.0
EQ2107	7.0	6.8	6.7	6.6	5.1	4.4	3.7	3.0	2.2	1.5	1.0
EQ2108	8.0	7.8	7.7	7.5	5.8	5.0	4.1	3.3	2.4	1.6	1.0
EQ2109	9.0	8.8	8.7	8.5	6.5	5.6	4.6	3.6	2.6	1.7	1.0
EQ2110	10.0	9.7	9.6	9.4	7.2	6.1	5.0	3.9	2.9	1.8	1.0
EQ2111	11.0	10.7	10.6	10.3	7.9	6.7	5.5	4.3	3.1	1.8	1.0
EQ2112	12.0	11.7	11.5	11.3	8.6	7.3	5.9	4.6	3.3	1.9	1.0
EQ2113	13.0	12.6	12.5	12.2	9.3	7.8	6.4	4.9	3.5	2.0	1.0
EQ2114	14.0	13.6	13.4	13.1	10.0	8.4	6.8	5.3	3.7	2.1	1.0
EQ2115	15.0	14.6	14.4	14.1	10.7	9.0	7.3	5.6	3.9	2.2	1.0
EQ2116	16.0	15.5	15.4	15.0	11.4	9.5	7.7	5.9	4.1	2.3	1.0
EQ2117	17.0	16.5	16.3	15.9	12.1	10.1	8.2	6.2	4.3	2.4	1.0
EQ2118	18.0	17.5	17.3	16.9	12.7	10.7	8.6	6.6	4.5	2.4	1.0
EQ2119	19.0	18.5	18.2	17.8	13.4	11.3	9.1	6.9	4.7	2.5	1.0
EQ2120	20.0	19.4	19.2	18.7	14.1	11.8	9.5	7.2	4.9	2.6	1.0
EQ2121	21.0	20.4	20.2	19.7	14.8	12.4	10.0	7.5	5.1	2.7	1.0

Table 37 EQ21xx Series Linear Equalizers Specifications



(cont'd)

Model	Insertion Loss in dB at Frequency (MHz)										
	45	70	80	100	300	400	500	600	700	800	870
Passband Flatness: ± 0.3 dB Insertion Loss: 1 dB Impedance: 75 ohms Flatness measured with respect to slope. Return Loss I/O: 18/18 dB min. All in purple plastic.											

Table 38 EQ21xxE Series Linear Equalizers Specifications



Model	Insertion Loss in dB at Frequency (MHz)	
	45	1220
EQ2102E	2.6	0.6
EQ2103E	3.6	0.6
EQ2104E	4.6	0.6
EQ2105E	5.6	0.6
EQ2106E	6.6	0.6
EQ2107E	7.6	0.6
EQ2108E	8.6	0.6
EQ2109E	9.6	0.6
EQ2110E	10.6	0.6
EQ2111E	11.6	0.6
EQ2112E	12.6	0.6
Passband Flatness: 0.3 Flatness measured with respect to slope. Return Loss I/O: -20 dB min./-22 dB max. All in pink plastic.		

Table 39 EQ21xxG Series Linear Equalizers Specifications



Model	Insertion Loss in dB at Frequency (MHz)										
	45	70	100	300	400	500	600	700	800	900	1000
EQ2100G	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EQ2102G	2.0	2.0	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0
EQ2103G	3.0	2.9	2.9	2.5	2.3	2.0	1.8	1.6	1.4	1.2	1.0
EQ2104G	4.0	3.9	3.8	3.2	2.9	2.6	2.3	1.9	1.6	1.3	1.0
EQ2105G	5.0	4.9	4.8	3.9	3.5	3.1	2.7	2.3	1.8	1.4	1.0
EQ2106G	6.0	5.9	5.7	4.7	4.1	3.6	3.1	2.6	2.0	1.5	1.0
EQ2107G	7.0	6.8	6.7	5.4	4.8	4.1	3.5	2.9	2.3	1.6	1.0
EQ2108G	8.0	7.8	7.6	6.1	5.4	4.7	3.9	3.2	2.5	1.7	1.0
EQ2109G	9.0	8.8	8.5	6.9	6.0	5.2	4.4	3.5	2.7	1.8	1.0
EQ2110G	10.0	9.8	9.5	7.6	6.7	5.7	4.8	3.8	2.9	1.9	1.0

Table 39 EQ21xxG Series Linear Equalizers Specifications



(cont'd)

Model	Insertion Loss in dB at Frequency (MHz)										
	45	70	100	300	400	500	600	700	800	900	1000
EQ2111G	11.0	10.7	10.4	8.3	7.3	6.2	5.2	4.1	3.1	2.0	1.0
EQ2112G	12.0	11.7	11.4	9.1	7.9	6.8	5.6	4.5	3.3	2.2	1.0
EQ2113G	13.0	12.7	12.3	9.8	8.5	7.3	6.0	4.8	3.5	2.3	1.0
EQ2114G	14.0	13.7	13.3	10.5	9.2	7.8	6.4	5.1	3.7	2.4	1.0
EQ2115G	15.0	14.6	14.2	11.3	9.8	8.3	6.9	5.4	3.9	2.5	1.0
EQ2116G	16.0	15.6	15.1	12.0	10.4	8.9	7.3	5.7	4.1	2.6	1.0
EQ2117G	17.0	16.6	16.1	12.7	11.1	9.4	7.7	6.0	4.4	2.7	1.0
EQ2118G	18.0	17.6	17.0	13.5	11.7	9.9	8.1	6.3	4.6	2.8	1.0
EQ2119G	19.0	18.5	18.0	14.2	12.3	10.4	8.5	6.7	4.8	2.9	1.0
EQ2120G	20.0	19.5	18.9	14.9	12.9	10.9	9.0	7.0	5.0	3.0	1.0
Passband Flatness: ± 0.3 dB Insertion Loss: 1 dB Impedance: 75 ohms Flatness measured with respect to slope. Return Loss I/O: 18/18 dB min. All in red plastic.											

Table 40 EQ41xx Series Linear Equalizers Specifications



Model	Insertion Loss in dB at Frequency (MHz)		
	54	550	870
EQ4100	0.1	0.1	0.1
EQ4101	1.2	0.8	0.5
EQ4102	2.0	1.0	0.5
EQ4103	3.4	1.8	0.5
EQ4104	4.6	2.4	1.0
EQ4105	5.6	2.8	1.0
EQ4106	6.7	3.2	1.0
EQ4107	7.8	3.7	1.0
EQ4108	9.0	4.1	1.0
EQ4109	10.1	4.6	1.0
EQ4110	11.3	5.0	1.0
EQ4111	12.5	5.3	1.0
EQ4112	13.4	5.7	1.0
Insertion Loss: 1 dB Frequency Response: ± 0.3 dB, max. Return Loss I/O: 18 dB min.			



Table 41 EQ41xxG Series Linear Equalizers Specifications

Model	Insertion Loss in dB at Frequency (MHz)			
	54	550	870	1003
EQ4100G	0.1	0.1	0.1	0.1
EQ4101G	1.2	0.8	0.5	0.3
EQ4102G	2.0	1.0	0.5	0.3
EQ4103G	3.4	1.8	0.7	0.5
EQ4104G	4.6	2.4	1.0	0.5
EQ4105G	5.6	2.8	1.0	0.5
EQ4106G	6.7	3.3	1.0	0.5
EQ4107G	7.8	3.9	1.4	1.0
EQ4108G	9.0	4.4	1.5	1.0
EQ4109G	10.1	5.0	1.8	1.0
EQ4110G	11.3	5.5	1.9	1.0
EQ4111G	12.5	6.0	2.0	1.0
EQ4112G	13.5	6.5	2.2	1.0
EQ4113G	14.5	6.6	2.0	1.0
Insertion Loss: 1 dB Frequency Response: ± 0.3 dB, max. Return Loss I/O: 18 dB min.				



Table 42 EQL-1220MHz-xx Series Linear Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)	
		45	1100
EQL-1220MHz-01	1510053-001	1.6	0.6
EQL-1220MHz-02	1510053-002	2.6	0.6
EQL-1220MHz-03	1510053-003	3.6	0.6
EQL-1220MHz-04	1510053-004	4.6	0.6
EQL-1220MHz-05	1510053-005	5.6	0.6
EQL-1220MHz-06	1510053-006	6.6	0.6
EQL-1220MHz-07	1510053-007	7.6	0.6
EQL-1220MHz-08	1510053-008	8.6	0.6
EQL-1220MHz-09	1510053-009	9.6	0.6
EQL-1220MHz-10	1510053-010	10.6	0.6
EQL-1220MHz-11	1510053-011	11.6	0.6
EQL-1220MHz-12	1510053-012	12.6	0.6
Passband Flatness: ± 0.3 dB Flatness measured with respect to slope. Return Loss: -20 dB min., -22 dB max. All in gray plastic.			



Table 43 FEQC-1GHz Series Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)										
		47	100	200	300	400	500	600	700	800	900	1000
FEQC-1G-02	727900	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.9	0.8
FEQC-1G-03	727901	2.8	2.6	2.2	2.0	1.8	1.6	1.4	1.2	1.1	0.9	0.8
FEQC-1G-04	727902	3.8	3.4	3.0	2.6	2.3	2.0	1.7	1.5	1.2	1.0	0.8
FEQC-1G-05	727903	4.8	4.3	3.7	3.2	2.8	2.4	2.0	1.7	1.4	1.1	0.8
FEQC-1G-06	727904	5.8	5.2	4.4	3.8	3.2	2.8	2.3	1.9	1.5	1.2	0.8
FEQC-1G-07	727905	6.8	6.1	5.1	4.4	3.7	3.1	2.6	2.1	1.7	1.2	0.8
FEQC-1G-08	727906	7.8	7.0	5.8	5.0	4.2	3.5	2.9	2.3	1.8	1.3	0.8
FEQC-1G-09	727907	8.8	7.8	6.6	5.6	4.7	3.9	3.2	2.6	2.0	1.4	0.8
FEQC-1G-10	727908	9.8	8.7	7.3	6.2	5.2	4.3	3.5	2.8	2.1	1.4	0.8
FEQC-1G-11	727909	11.0	9.8	8.2	7.0	5.9	4.9	4.0	3.2	2.4	1.7	1.0
FEQC-1G-12	727910	12.0	10.7	8.9	7.5	6.4	5.3	4.3	3.4	2.6	1.8	1.0
FEQC-1G-13	727911	13.0	11.6	9.6	8.1	6.8	5.7	4.6	3.7	2.7	1.9	1.0
FEQC-1G-14	727912	14.0	12.5	10.4	8.7	7.3	6.1	4.9	3.9	2.9	1.9	1.0
FEQC-1G-15	727913	15.0	13.3	11.1	9.3	7.8	6.5	5.2	4.1	3.0	2.0	1.0
FEQC-1G-16	727914	16.0	14.2	11.8	9.9	8.3	6.9	5.5	4.3	3.2	2.1	1.0
FEQC-1G-17	727915	17.0	15.1	12.5	10.5	8.8	7.3	5.9	4.5	3.3	2.1	1.0
FEQC-1G-18	728060	18.0	16.0	13.3	11.1	9.3	7.7	6.2	4.8	3.5	2.2	1.0
FEQC-1G-19	727917	19.0	16.9	14.0	11.7	9.8	8.0	6.5	5.0	3.6	2.3	1.0
FEQC-1G-20	727918	20.0	17.7	14.7	12.3	10.3	8.4	6.8	5.2	3.7	2.4	1.0
FEQC-1G-21	727919	21.0	18.6	15.4	12.9	10.7	8.8	7.1	5.4	3.9	2.4	1.0
FEQC-1G-22	727920	22.0	19.5	16.1	13.5	11.2	9.2	7.4	5.6	4.0	2.5	1.0
FEQC-1G-23	727921	23.0	20.4	16.9	14.1	11.7	9.6	7.7	5.9	4.2	2.6	1.0
FEQC-1G-24	728061	24.0	21.3	17.6	14.7	12.2	10.0	8.0	6.1	4.3	2.6	1.0
Return Loss I/O: 22/22 dB min. (FEQC-1G-02 to 20) 20/20 dB min. (FEQC-1G-21 to 24) Tolerance: ±0.3dB (FEQC-1G-02 to 20) ±0.5dB (FEQC-1G-21 to 24)							Specification Document Number 1504826					



Table 44 FEQC-750MHz Series Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)								
		47	100	200	300	400	500	600	700	750
FEQC-750-02	787652	1.8	1.7	1.5	1.3	1.2	1.1	0.95	0.85	0.8
FEQC-750-04	787654	3.8	3.4	2.8	2.3	1.9	1.6	1.25	0.95	0.8
FEQC-750-06	787656	5.8	5.1	4.1	3.3	2.7	2.1	1.5	1.0	0.8
FEQC-750-08	787658	7.8	6.8	5.4	4.3	3.4	2.6	1.8	1.1	0.8
FEQC-750-10	787660	9.8	8.5	6.7	5.3	4.2	3.1	2.1	1.2	0.8
FEQC-750-12	787662	12.0	10.4	8.2	6.6	5.1	3.8	2.6	1.5	1.0
FEQC-750-14	787665	14.0	12.1	9.6	7.6	5.9	4.3	2.9	1.6	1.0
Return Loss I/O: 22/22dB min. Tolerance: ±0.3dB							Specification Document Number 1505649			

Table 45 FEQC-870MHz Series Cable Equalizers Specifications



Model	P/N	Insertion Loss in dB at Frequency (MHz)									
		47	100	200	300	400	500	600	700	800	870
FEQC-870-02	787638	2.2	2.0	1.75	1.5	1.35	1.2	1.0	0.9	0.75	0.65
FEQC-870-03	787639	3.0	2.7	2.3	2.0	1.7	1.45	1.2	1.0	0.8	0.65
FEQC-870-04	787640	3.8	3.4	2.85	2.4	2.0	1.7	1.4	1.1	0.8	0.65
FEQC-870-05	787641	4.6	4.1	3.4	2.9	2.4	2.0	1.6	1.2	0.9	0.65
FEQC-870-06	787642	5.4	4.8	4.0	3.3	2.75	2.25	1.8	1.3	0.9	0.65
FEQC-870-07	787643	7.0	6.2	5.1	4.2	3.45	2.8	2.15	1.6	1.0	0.65
FEQC-870-08	787644	7.8	6.9	5.6	4.65	3.8	3.0	2.3	1.7	1.1	0.65
FEQC-870-09	787645	8.7	7.7	6.3	5.25	4.3	3.5	2.7	1.95	1.3	0.80
FEQC-870-10	787646	10.3	9.1	7.4	6.1	5.0	4.0	3.05	2.2	1.35	0.80
FEQC-870-11	787647	11.1	9.8	8.0	6.6	5.35	4.25	3.25	2.3	1.4	0.80
FEQC-870-12	787648	11.9	10.5	8.6	7.0	5.7	4.6	3.5	2.5	1.6	1.00
FEQC-870-13	787649	12.8	11.2	9.1	7.5	6.1	4.8	3.7	2.6	1.6	0.90
FEQC-870-14	787650	14.0	12.3	10.0	8.2	6.7	5.3	4.0	2.8	1.7	1.0
Return Loss I/O: 22/22dB min. (FEQC-870-02 to -08) 20/20dB min. (FEQC-870-09 to 12 and 14) 18/18dB min. (FEQC-870-13) Tolerance: ±0.3dB							Specification Document Number 1505648				

Table 46 GEQC-1GHz Cable Equalizers Specifications



Model	P/N	Insertion Loss in dB at Frequency (MHz)											
		45	54	70	80	222	400	500	600	700	800	870	1000
GEQC-1GHz-050	771000	4.7	4.6	4.5	4.4	3.5	2.7	2.3	2.0	1.7	1.4	1.2	0.7
GEQC-1GHz-070	771001	6.4	6.2	6.0	5.9	4.6	3.5	3.0	2.5	2.0	1.6	1.4	0.7
GEQC-1GHz-090	725168	7.8	7.6	7.5	7.3	5.7	4.2	3.5	2.8	2.1	1.6	1.3	0.8
Passband Flatness: ± 0.3 dB Return Loss I/O: 22/22 dB min.									Specification Document Number 1502429				

Table 47 GEQC-870 Cable Equalizers Specifications



Model	P/N	Insertion Loss in dB at Frequency (MHz)										
		45	54	70	80	222	400	500	600	700	800	870
GEQC-870-080	725512	6.9	6.8	6.6	6.5	4.9	3.5	2.9	2.2	1.5	1.0	0.7
Passband Flatness: ± 0.3 dB Return Loss I/O: 22/22 dB min.									Specification Document Number 1501842			

Table 48 GEQL-1GHZ-xxx and GEQL-1GHZ-xxx-1 Series Linear Equalizers Specifications



Model	P/N	Model	P/N	Insertion Loss in dB at Frequency (MHz)										
				45	70	100	300	400	500	600	700	800	900	1002
GEQL-1GHZ-000	724574	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GEQL-1GHZ-020	724481	GEQL-1GHZ-020-1	725261	2.0	2.0	1.9	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0
GEQL-1GHZ-030	724496	GEQL-1GHZ-030-1	725271	3.0	2.9	2.9	2.5	2.3	2.0	1.8	1.6	1.4	1.2	1.0
GEQL-1GHZ-040	724495	GEQL-1GHZ-040-1	725260	4.0	3.9	3.8	3.2	2.9	2.6	2.3	2.0	1.6	1.3	1.0
GEQL-1GHZ-050	724404	GEQL-1GHZ-050-1	725272	5.0	4.9	4.8	3.9	3.5	3.1	2.7	2.3	1.8	1.4	1.0
GEQL-1GHZ-060	724355	GEQL-1GHZ-060-1	725243	6.0	5.9	5.7	4.7	4.1	3.6	3.1	2.6	2.0	1.5	1.0
GEQL-1GHZ-070	724320	GEQL-1GHZ-070-1	725247	7.0	6.8	6.7	5.4	4.8	4.1	3.5	2.9	2.3	1.6	1.0
GEQL-1GHZ-080	724272	GEQL-1GHZ-080-1	725199	8.0	7.8	7.6	6.1	5.4	4.7	3.9	3.2	2.5	1.7	1.0
GEQL-1GHZ-090	724279	GEQL-1GHZ-090-1	725064	9.0	8.8	8.5	6.9	6.0	5.2	4.4	3.5	2.7	1.8	1.0
GEQL-1GHZ-100	724294	GEQL-1GHZ-100-1	725080	10.0	9.8	9.5	7.6	6.7	5.7	4.8	3.8	2.9	1.9	1.0
GEQL-1GHZ-110	724275	GEQL-1GHZ-110-1	725180	11.0	10.7	10.4	8.3	7.3	6.2	5.2	4.1	3.1	2.0	1.0
GEQL-1GHZ-120	724255	GEQL-1GHZ-120-1	725076	12.0	11.7	11.4	9.1	7.9	6.8	5.6	4.5	3.3	2.2	1.0
GEQL-1GHZ-130	724475	GEQL-1GHZ-130-1	725209	13.0	12.8	12.4	9.9	8.6	7.3	6.1	4.8	3.5	2.3	1.0
Passband Flatness: ±0.15 dB (GEQL-1GHZ-000) ±0.3 dB (GEQL-1GHZ-020 to 130) Flatness measured with respect to slope. Return Loss I/O: 18/18 dB min. All in red plastic.								Specification Document Number 1500202 Specification Document Number 1502283						

Table 49 GEQL-87-xxx and GEQL-870-xxx-1 Series Linear Equalizers Specifications



Model	P/N	Model	P/N	Insertion Loss in dB at Frequency (MHz)										
				54	70	80	100	300	400	500	600	700	800	870
GEQL-870-020	725405	GEQL-870-020-1	725729	2.0	2.0	2.0	1.9	1.7	1.6	1.5	1.3	1.2	1.1	1.0
GEQL-870-030	725406	GEQL-870-030-1	725711	3.0	3.0	2.9	2.9	2.4	2.2	1.9	1.7	1.4	1.2	1.0
GEQL-870-040	725400	GEQL-870-040-1	725745	4.0	3.9	3.9	3.8	3.1	2.7	2.4	2.0	1.6	1.3	1.0
GEQL-870-050	725386	GEQL-870-050-1	725730	5.0	4.9	4.8	4.7	3.8	3.3	2.8	2.3	1.8	1.3	1.0
GEQL-870-060	725114	GEQL-870-060-1	725582	6.0	5.8	5.8	5.7	4.5	3.8	3.2	2.6	2.0	1.4	1.0
GEQL-870-070	725401	GEQL-870-070-1	725708	7.0	6.8	6.7	6.6	5.1	4.4	3.7	3.0	2.2	1.5	1.0
GEQL-870-080	725402	GEQL-870-080-1	725573	8.0	7.8	7.7	7.5	5.8	5	4.1	3.3	2.4	1.6	1.0
GEQL-870-090	725403	GEQL-870-090-1	725651	9.0	8.8	8.7	8.5	6.5	5.6	4.6	3.6	2.6	1.7	1.0
GEQL-870-100	725407	GEQL-870-100-1	725701	10.0	9.7	9.6	9.4	7.2	6.1	5.0	3.9	2.9	1.8	1.0
GEQL-870-110	725358	GEQL-870-110-1	725766	11.0	10.7	10.6	10.3	7.9	6.7	5.5	4.3	3.1	1.8	1.0
GEQL-870-120	725408	GEQL-870-120-1	725577	12.0	11.7	11.5	11.3	8.6	7.3	5.9	4.6	3.3	1.9	1.0
GEQL-870-130	725404	GEQL-870-130-1	725618	13.0	12.6	12.5	12.2	9.3	7.8	6.4	4.9	3.5	2.0	1.0
Passband Flatness: ±0.3dB Return Loss I/O: 18/18dB min. Flatness measured with respect to slope. All in purple plastic.								Specification Document Number 1500774 Specification Document Number 1502284						

Table 50 MEQ-42 and MEQT-42 Series Return Cable Equalizers Specifications



Model	P/N	Insertion Loss in dB at Frequency (MHz)		dB of Cable Equalized at Frequency (MHz)					
		5	42	42	300	400	450	550	750
MEQ-42-2	724154	3.0	1.0	3.0	8.0	9.4	10.2	11.3	13.4
MEQ-42-3	724230	4.0	1.0	4.6	12.6	15.0	15.8	17.7	21.0
MEQ-42-4	724435	5.0	1.0	6.1	16.7	19.4	20.7	23.0	27.0
MEQ-42-5	724557	6.0	1.0	7.6	20.4	23.8	25.4	28.3	33.0
MEQ-42-6	724614	7.0	1.0	9.1	24.6	29.0	30.4	34.0	39.6
MEQ-42-7	724518	8.0	1.0	10.6	27.0	31.5	33.0	36.4	45.5
MEQT-42-2	724351	3.6	2.5	3.2	9.0	10.5	11.2	12.5	14.9
MEQT-42-3	724542	5.6	2.5	4.7	13.0	15.2	16.2	18.1	21.5
MEQT-42-4	724669	6.8	2.5	6.5	18.0	21.0	22.4	25.0	29.8
MEQT-42-5	724742	8.4	2.5	9.0	25.0	29.2	31.1	34.7	41.4
MEQT-42-6	724778	8.7	2.5	9.4	26.0	30.4	32.4	36.1	43.1
MEQT-42-7	724644	10.1	2.5	11.5	32.0	37.4	39.8	44.5	53.0
Passband Flatness: ±0.2dB (MEQ-42-x) ±0.3dB (MEQT-42-x) Return Loss I/O: 18/16dB min.				MEQ-42 Specification Document Number 600540 MEQT-42 Specification Document Number 600595					



Table 51 MEQ-55 Series Return Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)		dB of cable equalized at Frequency (MHz)					
		5	55	55	300	400	450	550	750
MEQ-55-2	726090	1.9	1.0	1.2	3.0	3.5	3.7	4.2	5.0
MEQ-55-3	726091	2.7	1.0	2.5	6.0	7.0	7.5	8.3	9.9
MEQ-55-4	762225	3.6	1.0	3.7	9.0	10.5	11.2	12.5	14.9
MEQ-55-5	762227	4.5	1.0	4.9	12.0	14.0	14.9	16.7	19.9
MEQ-55-6	726299	5.6	1.0	6.6	16.0	18.7	19.9	22.2	26.5
MEQ-55-7	762230	6.8	1.0	8.2	20.0	23.4	24.9	27.8	33.1
Passband Flatness: ±0.2dB Return Loss I/O: 18/16dB min.				Specification Document Number 600695					



Table 52 MEQ-65 Series Return Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)		dB of Cable Equalized at Frequency (MHz)					
		5	65	65	300	400	450	550	750
MEQ-65-02	724846	2.0	1.0	1.3	3.0	3.5	3.7	4.2	5.0
MEQ-65-03	724852	2.9	1.0	2.7	6.0	7.0	7.5	8.3	9.9
MEQ-65-04	724696	3.9	1.0	4.0	9.0	10.5	11.2	12.5	14.9
MEQ-65-05	724818	5.2	1.0	5.8	13.0	15.2	16.2	18.1	21.5
MEQ-65-06	724910	6.2	1.0	7.1	16.0	18.7	19.9	22.2	26.5
MEQ-65-07	724973	7.1	1.0	8.5	19.0	22.2	23.6	26.4	31.5
Passband Flatness: ± 0.1 dB Return Loss I/O: 18/16 dB min.				Specification Document Number 600615					



Table 53 MEQ-85 and MEQT-85 Series Return Cable Equalizers Specifications

Model	P/N	Insertion Loss @ 23C in dB at Frequency (MHz)		Cable Loss @ 23C	Insertion Loss @ -20C in dB at Frequency (MHz)		Insertion Loss @ 80C in dB at Frequency (MHz)	
		5	85		5	85	550	750
MEQ-85-2	775422	1.98	1.00	1.30	—	—	—	—
MEQ-85-3	775423	2.97	1.00	2.60	—	—	—	—
MEQ-85-4	775424	4.03	1.00	4.00	—	—	—	—
MEQ-85-5	775425	5.01	1.00	5.30	—	—	—	—
MEQ-85-6	775426	6.00	1.00	6.60	—	—	—	—
MEQ-85-7	775427	7.06	1.00	8.00	—	—	—	—
MEQT-85-2	775428	3.48	2.50	1.30	4.01	3.14	2.96	1.91
MEQT-85-3	775429	4.47	2.50	2.60	5.04	3.28	3.92	1.81
MEQT-85-4	775430	5.43	2.50	4.00	6.13	3.43	4.96	1.71
MEQT-85-5	775431	6.51	2.50	5.30	7.15	3.57	6.02	1.72
MEQT-85-6	775432	7.50	2.50	6.60	8.17	3.71	7.08	1.72
MEQT-85-7	775433	8.56	2.50	8.00	9.27	3.86	8.02	1.62
Passband Flatness: ± 0.2 dB (MEQ-85, MEQT-85-2 to 4) ± 0.3 dB (MEQT-85-5 to 7) Return Loss I/O: 18/16 dB min.				MEQ-85 Specification Document Number 1504358 MEQT-85 Specification Document Number 1504359				



Table 54 NEQL-870 Series Linear Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)										
		54	70	80	100	300	400	500	600	700	800	870
NEQL-870-050	725236	5.0	4.9	4.8	4.7	3.8	3.3	2.8	2.3	1.8	1.3	1.0
NEQL-870-060	725220	6.0	5.8	5.8	5.7	4.5	3.8	3.2	2.6	2.0	1.4	1.0

Table 54 NEQL-870 Series Linear Equalizers Specifications



(cont'd)

Model	P/N	Insertion Loss in dB at Frequency (MHz)										
		54	70	80	100	300	400	500	600	700	800	870
NEQL-870-050	725236	5.0	4.9	4.8	4.7	3.8	3.3	2.8	2.3	1.8	1.3	1.0
NEQL-870-060	725220	6.0	5.8	5.8	5.7	4.5	3.8	3.2	2.6	2.0	1.4	1.0
NEQL-870-070	725388	7.0	6.8	6.7	6.6	5.1	4.4	3.7	3.0	2.2	1.5	1.0
NEQL-870-080	725170	8.0	7.8	7.7	7.5	5.8	5.0	4.1	3.3	2.4	1.6	1.0
NEQL-870-090	725102	9.0	8.8	8.7	8.5	6.5	5.6	4.6	3.6	2.6	1.7	1.0
NEQL-870-100	725135	10.0	9.7	9.6	9.4	7.2	6.1	5.0	3.9	2.9	1.8	1.0
NEQL-870-110	725217	11.0	10.7	10.6	10.3	7.9	6.7	5.5	4.3	3.1	1.8	1.0
NEQL-870-120	725229	12.0	11.7	11.5	11.3	8.6	7.3	5.9	4.6	3.3	1.9	1.0
NEQL-870-130	726401	13.0	12.6	12.5	12.2	9.3	7.8	6.4	4.9	3.5	2.0	1.0
NEQL-870-140	726402	14.1	13.8	13.6	13.3	10.2	8.6	7.0	5.5	3.9	2.3	1.2
NEQL-870-150	776407	15.0	14.8	14.6	14.3	10.9	9.2	7.5	5.8	4.1	2.4	1.2
Passband Flatness: ± 0.3 dB Return Loss I/O: 18/18 dB min. Flatness measured with respect to slope. All in yellow plastic.							Specification Document Number 601264					

Table 55 PEQ-1G Cable Equalizers Specifications



Model	P/N	Insertion Loss (dB) @ Frequency (MHz)											Cable Loss @ 1002 MHz
		54	85	105	222	350	450	550	650	750	870	1002	
PEQ-1G-02	725369	2.0	1.9	1.8	1.5	1.4	1.3	1.2	1.0	0.8	0.7	0.7	1.55
PEQ-1G-03	725370	2.9	2.8	2.6	2.3	2.1	1.9	1.7	1.4	1.1	0.9	0.8	2.80
PEQ-1G-04	725371	4.0	3.8	3.6	3.1	2.6	2.3	2.1	1.9	1.6	1.4	1.0	3.70
PEQ-1G-05	725372	5.0	4.7	4.6	3.8	3.1	2.7	2.4	2.0	1.7	1.4	1.0	5.10
PEQ-1G-06	725373	6.0	5.7	5.5	4.6	3.8	3.3	2.8	2.4	2.0	1.6	1.0	6.35
PEQ-1G-07	725374	7.0	6.6	6.4	5.4	4.4	3.8	3.1	2.6	2.0	1.6	1.0	7.75
PEQ-1G-08	725375	8.0	7.4	7.1	5.8	4.7	4.0	3.4	2.8	2.2	1.6	1.0	8.90
PEQ-1G-09	725376	9.0	8.5	8.2	6.8	5.4	4.5	3.8	3.1	2.5	1.9	1.0	10.20
PEQ-1G-10	725376	10.0	9.3	9.0	7.3	5.7	4.8	4.0	3.2	2.5	1.9	1.0	11.45
PEQ-1G-11	725378	11.0	10.4	10.0	8.1	6.4	5.4	4.5	3.7	2.9	2.1	1.0	12.70
PEQ-1G-12	725379	12.0	11.1	10.8	8.8	7.0	5.9	4.9	3.9	3.0	2.1	1.0	14.00
PEQ-1G-13	725380	13.0	12.2	11.8	9.5	7.6	6.3	5.1	4.1	3.2	2.2	1.0	15.25
PEQ-1G-14	778087	14.0	13.0	12.4	10.2	8.2	6.9	5.7	4.6	3.5	2.3	1.0	16.50
PEQ-1G-15	725381	14.9	13.9	13.3	10.8	8.6	7.1	5.8	4.6	3.5	2.3	1.0	17.80
PEQ-1G-16	725382	16.0	14.9	14.3	11.5	9.2	7.6	6.3	5.0	3.7	2.4	1.0	19.05
PEQ-1G-17	725383	17.0	15.6	15.0	12.2	9.7	8.0	6.5	5.2	3.9	2.4	1.0	20.30
PEQ-1G-18	725384	18.0	16.9	16.2	13.2	10.5	8.7	7.0	5.6	4.0	2.4	0.8	21.80
PEQ-1G-19	725385	19.0	17.7	16.9	13.7	10.8	9.0	7.3	5.7	4.1	2.4	0.8	23.05
PEQ-1G-20	778088	20.0	18.5	17.7	14.2	11.2	9.3	7.6	6.0	4.4	2.6	0.8	24.05



Table 55 PEQ-1G Cable Equalizers Specifications

(cont'd)

Passband Flatness: ± 0.3 dB (PEQ-1G-02 to 18) ± 0.4 dB (PEQ-1G-19 and 20) Return Loss I/O: 18/18 dB min. (PEQ-1G-02 to 18) 16/16 dB min. (PEQ-1G-19 and 20)	Specification Document Number 1503587
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Table 56 REQC-42MHz Series Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)					
		5	10	20	30	40	42
REQC-42-2	788504	2.0	1.7	1.3	1.0	0.70	0.65
REQC-42-3	788505	2.8	2.4	1.75	1.3	0.90	0.8
REQC-42-4	788506	3.3	2.7	1.9	1.3	0.75	0.65
REQC-42-5	788507	4.6	3.8	2.55	1.6	0.8	0.65
REQC-42-6	788508	5.95	4.8	3.2	1.9	0.85	0.65
REQC-42-7	788509	7.40	6.0	4.0	2.4	1.05	0.80
REQC-42-8	788510	7.80	6.3	4.1	2.5	1.1	0.80
REQC-42-9	788511	8.75	7.0	4.60	2.7	1.1	0.8
REQC-42-10	788512	10	8.1	5.3	3.2	1.3	1.0
REQC-42-11	788513	11	8.8	5.8	3.4	1.4	1.0
Return Loss I/O: 22/22 dB min. Tolerance: ± 0.3 dB		Specification Document Number 1505737					



Table 57 REQC-65MHz Series Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)							
		5	10	20	30	40	50	60	65
REQC-65-2	727923	1.8	1.7	1.5	1.3	1.1	1.0	0.9	0.8
REQC-65-3	727924	2.8	2.6	2.1	1.7	1.4	1.2	0.9	0.8
REQC-65-4	727925	3.8	3.4	2.7	2.2	1.7	1.3	0.9	0.8
REQC-65-5	727926	4.8	4.3	3.4	2.7	2.0	1.5	1.0	0.8
REQC-65-6	727927	5.8	5.3	4.1	3.2	2.4	1.7	1.1	0.8
REQC-65-7	727928	6.8	6.1	4.7	3.6	2.7	1.9	1.1	0.8
REQC-65-8	727929	7.8	7.0	5.4	4.1	3.0	2.1	1.2	0.8
REQC-65-9	727930	8.8	7.9	6.1	4.6	3.4	2.3	1.3	0.8
REQC-65-10	727931	10.0	8.9	6.8	5.2	3.8	2.6	1.5	1.0
REQC-65-11	727932	11.0	9.7	7.4	5.6	4.1	2.8	1.6	1.0
Return Loss I/O: 22/22 dB min. Tolerance: ± 0.3 dB		Specification Document Number 1504827							



Table 58 REQC-85MHz Series Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)									
		5	10	20	30	40	50	60	70	80	85
REQC-85-2	791130	2.0	1.9	1.7	1.5	1.4	1.3	1.2	1.1	1.05	1.0
REQC-85-3	791131	3.0	2.7	2.4	2.1	1.8	1.6	1.4	1.2	1.1	1.0
REQC-85-4	791132	4.0	3.6	3.05	2.6	2.2	1.9	1.65	1.4	1.1	1.0
REQC-85-5	791133	5.0	4.5	3.7	3.2	2.7	2.2	1.85	1.5	1.15	1.0
REQC-85-6	791134	6.0	5.35	4.4	3.7	3.1	2.6	2.1	1.6	1.2	1.0
REQC-85-7	791135	7.0	6.2	5.1	4.2	3.5	2.9	2.3	1.75	1.25	1.0
REQC-85-8	791136	8.0	7.1	5.8	4.8	3.9	3.2	2.5	1.9	1.3	1.0
REQC-85-9	791137	9.0	7.95	6.5	5.3	4.35	3.5	2.7	2.0	1.3	1.0
REQC-85-10	791138	10.0	8.8	7.2	5.9	4.8	3.8	2.9	2.1	1.35	1.0
REQC-85-11	791139	11.0	9.7	7.8	6.4	5.2	4.1	3.15	2.25	1.4	1.0
Return Loss I/O: 22/22dB min. Tolerance: ±0.3dB							Specification Document Number 1506125				



Table 59 SEQ-1G Series Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)											
		54	85	105	222	350	450	550	650	750	870	1002	*
SEQ-1G-0	724297	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEQ-1G-02	724252	2.0	1.9	1.8	1.5	1.4	1.3	1.2	1.0	0.8	0.7	0.7	1.55
SEQ-1G-03	724323	2.9	2.8	2.6	2.3	2.1	1.9	1.7	1.4	1.1	0.9	0.8	2.80
SEQ-1G-04	724313	4.0	3.8	3.6	3.1	2.6	2.3	2.1	1.9	1.6	1.4	1.0	3.70
SEQ-1G-05	724319	5.0	4.7	4.6	3.8	3.1	2.7	2.4	2.0	1.7	1.4	1.0	5.10
SEQ-1G-06	724248	6.0	5.7	5.5	4.6	3.8	3.3	2.8	2.4	2.0	1.6	1.0	6.35
SEQ-1G-07	724253	7.0	6.6	6.4	5.4	4.4	3.8	3.1	2.6	2.0	1.6	1.0	7.75
SEQ-1G-08	724261	8.0	7.4	7.1	5.8	4.7	4.0	3.4	2.8	2.2	1.6	1.0	8.90
SEQ-1G-09	724274	9.0	8.5	8.2	6.8	5.4	4.5	3.8	3.1	2.5	1.9	1.0	10.20
SEQ-1G-10	724280	10.0	9.3	9.0	7.3	5.7	4.8	4.0	3.2	2.5	1.9	1.0	11.45
SEQ-1G-11	724317	11.0	10.4	10.0	8.1	6.4	5.4	4.5	3.7	2.9	2.1	1.0	12.70
SEQ-1G-12	724300	12.0	11.1	10.8	8.8	7.0	5.9	4.9	3.9	3.0	2.1	1.0	14.0
SEQ-1G-13	724330	13.0	12.2	11.8	9.5	7.6	6.3	5.1	4.1	3.2	2.2	1.0	15.25
SEQ-1G-14	724345	14.0	13.0	12.4	10.2	8.2	6.9	5.7	4.6	3.5	2.3	1.0	16.5
SEQ-1G-15	724359	14.9	13.9	13.3	10.8	8.6	7.1	5.8	4.6	3.5	2.3	1.0	17.8
SEQ-1G-16	724368	16.0	14.9	14.3	11.5	9.2	7.6	6.3	5.0	3.7	2.4	1.0	19.05
SEQ-1G-17	724427	17.0	15.6	15.0	12.2	9.7	8.0	6.5	5.2	3.9	2.4	1.0	20.3
SEQ-1G-18	724425	18.0	16.9	16.2	13.2	10.5	8.7	7.0	5.6	4.0	2.4	0.8	21.8
SEQ-1G-19	724519	19.0	17.7	16.9	13.7	10/8	9.0	7.3	5.7	4.1	2.4	0.8	23.05



Table 59 SEQ-1G Series Cable Equalizers Specifications (cont'd)

Model	P/N	Insertion Loss in dB at Frequency (MHz)											
		54	85	105	222	350	450	550	650	750	870	1002	*
SEQ-1G-20	724502	20.0	18.2	17.7	14.2	11.2	9.3	7.6	6.0	4.4	2.6	0.8	24.05
Passband Flatness: ± 0.3 dB (SEQ-1G-02 to 18) ± 0.4 dB (SEQ-1G-19 and 20) Return Loss I/O: 18/18dB min. (SEQ-1G-02 to 18) 16/16dB min. (SEQ-1G-19 and 20)								*dB of cable equalized at 1002MHz <i>Specification Document Number 1500769</i>					



Table 60 SEQ-750 Series Cable Equalizers Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)									dB of cable equalized at highest frequency
		54	70	80	222	350	450	550	650	750	
SEQ-0	724376	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEQ-750-02	724907	2.0	2.0	2.0	1.8	1.4	1.3	1.3	1.2	1.0	1.5
SEQ-750-03	724920	3.0	2.8	2.7	2.4	1.9	1.7	1.5	1.3	1.0	2.5
SEQ-750-04	724955	3.9	3.9	3.8	3.1	2.4	2.0	1.7	1.4	1.0	4.0
SEQ-750-05	724911	4.9	4.6	4.5	3.5	2.9	2.3	1.8	1.4	1.0	5.0
SEQ-750-06	724861	5.9	5.7	5.6	4.2	3.3	2.7	2.0	1.5	1.0	6.5
SEQ-750-07	724885	7.0	6.8	6.6	5.0	3.6	2.8	2.0	1.6	1.0	8.0
SEQ-750-08	725006	8.0	7.9	7.6	5.5	4.2	3.3	2.5	1.8	1.0	9.0
SEQ-750-09	725070	9.0	8.8	8.6	6.3	4.8	3.8	2.7	2.0	1.0	10.5
SEQ-750-10	725025	9.8	9.4	9.2	6.7	5.0	3.8	2.8	2.0	1.0	12.0
SEQ-750-11	725004	11.0	10.5	10.2	7.5	5.5	4.2	3.0	2.0	1.0	13.5
SEQ-750-12	725208	11.8	11.3	11.0	8.1	6.0	4.6	3.3	2.2	1.0	14.5
SEQ-750-13	725257	12.9	12.4	12.2	8.9	6.6	5.1	3.7	2.5	1.0	16.0
SEQ-750-14	725205	14.0	13.5	13.2	9.7	6.9	5.3	3.8	2.5	1.0	17.0
SEQ-750-15	725139	14.9	14.3	13.9	10.1	7.5	5.8	4.3	2.6	1.0	18.5
SEQ-750-16	724859	15.8	14.9	14.5	10.5	8.0	6.1	4.4	2.7	1.0	20.0
SEQ-750-17	725058	16.8	16.0	15.6	11.3	8.2	6.2	4.4	2.6	1.0	21.0
SEQ-750-18	725120	17.9	17.1	16.6	11.9	8.6	6.6	4.6	2.6	1.0	22.4
SEQ-750-19	725119	18.8	17.8	17.4	12.3	9.1	6.9	4.8	2.7	1.0	23.7
SEQ-750-20	725160	19.8	19.0	18.5	13.2	9.5	7.2	5.0	2.8	1.0	25.0
SEQ-750-21	725273	20.8	19.8	19.3	13.4	10.0	7.5	5.2	2.9	1.0	26.3
SEQ-750-2-2	762194	2.8	2.8	2.8	2.5	2.3	2.2	2.1	2.1	2.0	1.1
SEQ-750-4-2	762239	4.5	4.4	4.3	3.6	3.1	2.8	2.5	2.2	2.0	3.3
SEQ-750-4-3	762241	5.5	5.4	5.3	4.7	4.1	3.8	3.5	3.2	3.0	3.3
SEQ-750-5-5	725184	8.9	8.6	8.6	7.6	6.9	6.3	5.8	5.4	5.0	5.0
Passband Flatness: ±0.3dB Return Loss I/O: 18/16dB min.							Specification Document Number 600563				

Table 61 SEQ-862 Series Cable Equalizers Specifications



Model	P/N	Insertion Loss in dB at Frequency (MHz)									dB of cable equalized at highest frequency
		54	70	80	222	500	600	700	800	862	
SEQ-0	724376	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEQ-862-02	724596	1.9	1.9	1.9	1.8	1.4	1.3	1.2	1.1	1.0	1.0
SEQ-862-03	724531	2.9	2.8	2.8	2.4	1.6	1.5	1.4	1.2	1.0	2.0
SEQ-862-04	724535	4.0	4.0	4.0	3.2	1.9	1.6	1.4	1.2	1.0	4.0
SEQ-862-05	724464	4.8	4.6	4.5	3.4	2.1	1.7	1.4	1.2	1.0	5.0
SEQ-862-06	724473	5.9	5.6	5.6	4.2	2.6	2.1	1.6	1.2	1.0	6.5
SEQ-862-07	724521	6.9	6.6	6.6	5.4	3.1	2.5	1.9	1.4	1.0	7.8
SEQ-862-08	724515	7.8	7.5	7.4	5.6	3.4	2.7	2.1	1.4	1.0	8.7
SEQ-862-09	724568	8.8	8.4	8.3	6.3	3.6	2.8	2.0	1.4	1.0	10.5
SEQ-862-10	724616	9.6	9.1	8.9	6.9	3.8	2.9	2.1	1.4	1.0	11.0
SEQ-862-11	724583	10.8	10.3	10.2	7.6	4.4	3.5	2.5	1.6	1.0	13.0
SEQ-862-12	724545	11.6	11.1	10.8	8.2	4.7	3.7	2.7	1.7	1.0	14.5
SEQ-862-13	724620	12.8	12.4	12.0	8.8	5.0	3.9	2.8	1.7	1.0	15.5
SEQ-862-14	724646	13.6	12.9	12.7	9.6	5.2	4.0	2.9	1.8	1.0	16.5
SEQ-862-15	724658	14.5	13.9	13.5	10.4	5.6	4.2	3.0	1.8	1.0	17.5
SEQ-862-16	724609	15.3	14.7	14.3	10.8	6.1	4.7	3.3	2.0	1.0	19.0
SEQ-862-17	724674	17.5	16.8	16.4	12.2	6.5	5.1	3.5	2.0	1.0	21.3
SEQ-862-18	724679	18.4	17.5	17.2	12.7	6.8	5.2	3.6	2.0	1.0	22.4
SEQ-862-19	724795	19.5	18.6	18.2	13.6	7.2	5.7	3.8	2.0	1.0	23.9
SEQ-862-20	724790	20.3	19.4	19.0	14.2	7.6	5.8	3.9	2.0	1.0	24.9
Passband Flatness: ±0.3dB Return Loss I/O: 20/18dB min.						Specification Document Number 600438 Rev J					



Table 62 SFE Series Forward Cable Equalizers Specifications

Insertion Loss in dB at Frequency (MHz)												
Model	Part Number	50	65	85	200	300	450	550	650	750	870	1003
SFE-100-0-R	535723-001-00	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
SFE-100-1-R	531124-001-00	-1.8	-1.8	-1.7	-1.6	-1.5	-1.3	-1.3	-1.2	-1.1	-1.1	-1.0
SFE-100-2-R	531124-002-00	-2.6	-2.5	-2.5	-2.1	-1.9	-1.7	-1.5	-1.4	-1.3	-1.1	-1.0
SFE-100-3-R	531124-003-00	-3.3	-3.2	-3.1	-2.7	-2.4	-2.0	-1.8	-1.6	-1.4	-1.2	-1.0
SFE-100-4-R	531124-004-00	-4.1	-4.0	-3.9	-3.2	-2.8	-2.3	-2.0	-1.8	-1.5	-1.3	-1.0
SFE-100-5-R	531124-005-00	-4.9	-4.7	-4.6	-3.8	-3.3	-2.7	-2.3	-2.0	-1.7	-1.3	-1.0
SFE-100-6-R	531124-006-00	-5.7	-5.5	-5.3	-4.3	-3.7	-3.0	-2.6	-2.2	-1.8	-1.4	-1.0
SFE-100-7-R	531124-007-00	-6.4	-6.3	-6.0	-4.9	-4.2	-3.3	-2.8	-2.4	-1.9	-1.5	-1.0
SFE-100-8-R	531124-008-00	-7.2	-7.0	-6.8	-5.4	-4.6	-3.6	-3.1	-2.6	-2.1	-1.5	-1.0
SFE-100-9-R	531124-009-00	-8.0	-7.8	-7.5	-6.0	-5.1	-4.0	-3.3	-2.8	-2.2	-1.6	-1.0
SFE-100-10-R	531124-010-00	-8.8	-8.6	-8.2	-6.5	-5.5	-4.3	-3.6	-2.9	-2.4	-1.7	-1.0
SFE-100-11-R	531124-011-00	-9.5	-9.2	-8.9	-7.1	-6.0	-4.6	-3.9	-3.1	-2.5	-1.8	-1.0
SFE-100-12-R	531124-012-00	-10.3	-10.0	-9.6	-7.6	-6.4	-5.0	-4.1	-3.3	-2.6	-1.8	-1.0
SFE-100-13-R	531124-013-00	-11.1	-10.8	-10.4	-8.2	-6.9	-5.3	-4.4	-3.5	-2.8	-1.9	-1.0
SFE-100-14-R	531124-014-00	-11.9	-11.6	-11.1	-8.7	-7.3	-5.6	-4.6	-3.7	-2.9	-2.0	-1.0
SFE-100-15-R	531124-015-00	-12.7	-12.4	-11.9	-9.3	-7.8	-6.0	-4.9	-3.9	-3.0	-2.0	-1.0
SFE-100-16-R	531124-016-00	-13.4	-13.0	-12.5	-9.9	-8.2	-6.3	-5.2	-4.1	-3.2	-2.1	-1.0
SFE-100-17-R	531124-017-00	-14.2	-13.8	-13.3	-10.4	-8.7	-6.6	-5.4	-4.3	-3.3	-2.2	-1.0
SFE-100-18-R	531124-018-00	-15.0	-14.6	-14.0	-11.0	-9.2	-6.9	-5.7	-4.5	-3.4	-2.2	-1.0
SFE-100-19-R	531124-019-00	-15.8	-15.3	-14.8	-11.5	-9.6	-7.3	-5.9	-4.7	-3.6	-2.3	-1.0
SFE-100-20-R	531124-020-00	-16.5	-16.0	-15.4	-12.1	-10.1	-7.6	-6.2	-4.9	-3.7	-2.4	-1.0
SFE-100-21-R	531124-021-00	-17.3	-16.8	-16.2	-12.6	-10.5	-7.9	-6.4	-5.1	-3.8	-2.4	-1.0
SFE-100-22-R	531124-022-00	-18.1	-17.6	-16.9	-13.2	-11.0	-8.3	-6.7	-5.3	-4.0	-2.5	-1.0
SFE-100-23-R	531124-023-00	-18.9	-18.3	-17.7	-13.7	-11.8	-8.6	-7.0	-5.5	-4.1	-2.6	-1.0
SFE-100-24-R	531124-024-00	-19.6	-19.1	-18.3	-14.3	-11.9	-8.9	-7.2	-5.7	-4.2	-2.6	-1.0

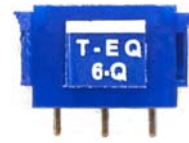


Table 63 T-EQ-*-Q Series Cable Equalizers Specifications

Specification	Frequency (MHz)	T-EQ-2-Q	T-EQ-4-Q	T-EQ-6-Q	T-EQ-8-Q	T-EQ-10-Q	T-EQ-12-Q	T-EQ-14-Q	T-EQ-16-Q	T-EQ-18-Q	T-EQ-20-Q	T-EQ-22-Q
EQ Value (dB nominal)	1003	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	22.0
Drop Insertion Loss* (dB max.)	5	2.9	4.1	6.2	7.8	9.2	11.1	12.9	14.8	18.1	20.0	22.0
	50	2.9	4.1	6.1	7.6	9.1	11.0	12.5	14.5	18.1	20.0	22.0
	85	2.9	4.1	6.0	7.6	8.9	10.8	12.5	14.0	17.6	18.6	20.0
	104	2.8	4.1	5.9	7.6	8.9	10.8	11.3	14.0	17.0	18.0	19.2
	300	2.4	3.6	4.7	5.9	7.2	8.6	9.4	10.9	12.1	12.4	12.4
	450	2.1	3.0	3.7	4.6	5.6	6.6	7.0	8.3	8.9	8.9	8.9
	550	1.9	2.5	3.1	3.8	4.5	5.4	5.6	6.8	7.1	7.1	7.1
	750	1.5	1.5	2.1	2.2	2.4	3.1	3.2	4.2	4.2	4.2	4.2
	870	1.2	1.2	1.5	1.5	1.6	2.1	2.2	2.9	2.9	2.9	2.9
	1000	1.0	1.0	0.9	1.1	1.1	1.2	1.2	1.8	1.8	1.8	1.8
	1218	1.0	1.0	0.9	1.1	1.1	1.1	1.1	1.2	1.5	1.5	1.5
Forward Response Flatness (dB max.)	—	± 0.5	± 0.5	± 0.5	± 0.7	± 0.7	± 0.7	± 0.8	± 0.9	±1.2	±1.2	±1.2

Cable Simulators and Cable Equivalents

Cable simulators provide sloped attenuation of RF signals with the greatest attenuation occurring at the highest frequency. They are plug-in fixed units, which are used in place of equalizers in the forward path in those cases where the cable spacing is less than the amount of equalization built into the amplifier.



Table 64 7-2E862Cx-WC Cable Simulators Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)								
		45	54	70	85	450	550	650	750	870
7-2E862C1-WC	725326	0.2	0.2	0.3	0.3	0.7	0.8	0.8	0.9	1.0
7-2E862C2-WC	725318	0.2	0.2	0.3	0.4	1.2	1.3	1.5	1.6	1.8
7-2E862C3-WC	725356	0.2	0.3	0.4	0.4	1.7	1.9	2.1	2.4	2.6
7-2E862C4-WC	725314	0.2	0.3	0.4	0.5	2.2	2.5	2.8	3.1	3.4
7-2E862C5-WC	725280	0.3	0.5	0.6	0.7	2.8	3.2	3.6	3.9	4.3
7-2E862C6-WC	725452	0.6	0.8	1.0	1.1	3.6	4.1	4.5	5.0	5.4
7-2E862C7-WC	725392	0.7	0.9	1.1	1.3	4.2	4.8	5.3	5.8	6.3
7-2E862C8-WC	725499	0.9	1.1	1.3	1.5	4.8	5.5	6.1	6.6	7.3
7-2E862C9-WC	725175	1.1	1.3	1.6	1.8	5.5	6.2	6.9	7.6	8.3
7-2E862C10-WC	725668	1.3	1.5	1.8	2.1	6.2	7.0	7.8	8.5	9.3
7-2E862C11-WC	725754	1.5	1.7	2.1	2.4	6.9	7.8	8.6	9.4	10.3
7-2E862C12-WC	725682	1.7	2.0	2.3	2.7	7.6	8.6	9.5	10.3	11.3
Passband Flatness: ±0.4dB Return Loss I/O: 16/16dB (7-2E862C1 to C6) 15/15 dB (7-2E862C7 to C12)						Specification Document Number 871541				

Table 65 CE862 Cable Equivalent Specifications



Model	P/N	Insertion Loss	
		47MHz	862 MHz
CE862/2	725713	1	2
CE862/4	725182	1	4
CE862/6	725177	1	6
CE862/8	726308	1	8



Table 66 PCS-1G Series Cable Simulators Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)								dB of cable simulated at Frequency (MHz)							
		50	70	80	550	750	806	862	1002	350	450	550	650	750	806	862	1002
PCS-1G-02	725360	1.0	1.0	1.1	1.6	1.8	1.9	1.9	2.0	0.7	0.8	0.9	1.0	1.1	1.1	1.2	1.3
PCS-1G-03	725361	1.0	1.1	1.1	2.3	2.6	2.7	2.8	3.0	1.4	1.6	1.8	2.0	2.2	2.2	2.3	2.5
PCS-1G-04	725362	1.0	1.1	1.2	2.9	3.4	3.6	3.7	4.0	2.1	2.4	2.7	3.0	3.2	3.3	3.5	3.8
PCS-1G-05	725363	1.0	1.2	1.3	3.6	4.3	4.4	4.6	5.0	2.8	3.2	3.6	3.9	4.3	4.5	4.6	5.0
PCS-1G-06	725364	1.0	1.2	1.3	4.2	5.1	5.3	5.5	6.0	3.5	4.0	4.5	4.9	5.3	5.6	5.8	6.3
PCS-1G-07	725365	1.0	1.3	1.4	4.9	5.9	6.2	6.4	7.0	4.2	4.8	5.4	5.9	6.4	6.7	6.9	7.5
PCS-1G-08	725366	1.0	1.3	1.5	5.5	6.7	7.0	7.3	8.0	4.9	5.6	6.3	6.9	7.5	7.8	8.1	8.8
PCS-1G-09	725367	1.0	1.4	1.5	6.1	7.5	7.9	8.2	9.0	5.6	6.4	7.2	7.9	8.6	8.9	9.2	10.0
PCS-1G-10	725368	1.0	1.4	1.6	6.8	8.3	8.7	9.1	10.0	6.3	7.2	8.1	8.9	9.6	10.0	10.4	11.3
PCS-1G-11	778084	1.0	1.5	1.7	7.4	9.2	9.6	10.0	11.0	7.0	8.0	9.0	9.9	10.7	11.1	11.5	12.5
PCS-1G-12	778085	1.0	1.5	1.7	8.1	10.0	10.5	10.9	12.0	7.7	8.8	9.9	10.8	11.8	12.2	12.7	13.8
Passband Flatness: ± 0.4 dB Return Loss I/O: 16/16dB min.													Specification 1503588				



Table 67 SCS-1G Series Cable Simulators Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)								dB of Cable Simulated at Frequency (MHz)							
		50	70	80	550	750	806	862	1002	350	450	550	650	750	806	862	1002
SCS-1G-02	724347	1.0	1.0	1.1	1.6	1.8	1.9	1.9	2.0	0.7	0.8	0.9	1.0	1.1	1.1	1.2	1.3
SCS-1G-03	724380	1.0	1.1	1.1	2.3	2.6	2.7	2.8	3.0	1.4	1.6	1.8	2.0	2.2	2.2	2.3	2.5
SCS-1G-04	724391	1.0	1.1	1.2	2.9	3.4	3.6	3.7	4.0	2.1	2.4	2.7	3.0	3.2	3.3	3.5	3.8
SCS-1G-05	724389	1.0	1.2	1.3	3.6	4.3	4.4	4.6	5.0	2.8	3.2	3.6	3.9	4.3	4.5	4.6	5.0
SCS-1G-06	724331	1.0	1.2	1.3	4.2	5.1	5.3	5.5	6.0	3.5	4.0	4.5	4.9	5.3	5.6	5.8	6.3
SCS-1G-07	724361	1.0	1.3	1.4	4.9	5.9	6.2	6.4	7.0	4.2	4.8	5.4	5.9	6.4	6.7	6.9	7.5
SCS-1G-08	724367	1.0	1.3	1.5	5.5	6.7	7.0	7.3	8.0	4.9	5.6	6.3	6.9	7.5	7.8	8.1	8.8
SCS-1G-09	724372	1.0	1.4	1.5	6.1	7.5	7.9	8.2	9.0	5.6	6.4	7.2	7.9	8.6	8.9	9.2	10.0
SCS-1G-10	724369	1.0	1.4	1.6	6.8	8.3	8.7	9.1	10.0	6.3	7.2	8.1	8.9	9.6	10.0	10.4	11.3
SCS-1G-11	724402	1.0	1.5	1.7	7.4	9.2	9.6	10.0	11.0	7.0	8.0	9.0	9.9	10.7	11.1	11.5	12.5
SCS-1G-12	724393	1.0	1.5	1.7	8.1	10.0	10.5	10.9	12.0	7.7	8.8	9.9	10.8	11.8	12.2	12.7	13.8
SCS-1G-13	724453	1.0	1.6	1.8	8.7	10.8	11.3	11.8	13.0	8.4	9.6	10.8	11.8	12.8	13.4	13.9	15.0
SCS-1G-14	724462	1.0	1.6	1.9	9.4	11.6	12.2	12.7	14.0	9.1	10.4	11.6	12.8	13.9	14.5	15.0	16.3
SCS-1G-15	724449	1.0	1.7	2.0	10.0	12.4	13.0	13.6	15.0	9.8	11.2	12.5	13.8	15.0	15.6	16.2	17.5
Passband Flatness: ± 0.4 dB Return Loss I/O: 18/16dB min.												Specification 1500883					



Table 68 SCS-862 Series Cable Simulators Specifications

Model	P/N	Insertion Loss in dB at Frequency (MHz)								dB of Cable Simulated at Frequency (MHz)					
		54	70	80	222	550	750	806	862	300	450	550	750	806	862
SCS-862-02	724785	1.0	1.0	1.0	1.3	1.7	1.9	2.0	2.0	0.7	0.8	1.0	1.2	1.2	1.3
SCS-862-03	724905	1.0	1.0	1.0	1.6	2.4	2.8	2.9	3.0	1.3	1.7	1.9	2.3	2.5	2.6
SCS-862-04	724825	1.0	1.1	1.2	1.9	3.2	3.8	3.9	4.0	2.0	2.6	2.9	3.5	3.8	3.9
SCS-862-05	724730	1.0	1.0	1.1	2.3	3.9	4.7	4.9	5.0	2.7	3.4	3.9	4.7	5.0	5.2
SCS-862-06	724887	1.0	1.0	1.2	2.6	4.6	5.5	5.8	6.0	3.3	4.2	4.8	5.7	6.2	6.4
SCS-862-07	724912	1.0	1.2	1.4	3.1	5.2	6.3	6.6	7.0	4.3	5.4	6.0	7.1	7.4	7.7
SCS-862-08	724938	1.0	1.3	1.4	3.3	6.0	7.3	7.6	8.0	5.0	6.2	6.9	8.2	8.6	8.9
SCS-862-09	724903	1.0	1.3	1.6	3.7	6.6	8.1	8.5	9.0	5.7	7.1	7.9	9.4	9.8	10.2
SCS-862-10	724902	1.0	1.4	1.6	3.9	7.3	9.0	9.4	10.0	6.4	8.0	8.9	10.6	11.1	11.5
SCS-862-11	725011	1.0	1.5	1.7	4.4	8.0	10.0	10.3	11.0	7.1	8.9	9.9	11.8	12.3	12.8
SCS-862-12	724971	1.0	1.5	1.7	4.8	8.7	10.9	11.4	12.0	7.9	9.8	11.0	13.1	13.6	14.1
SCS-862-13	724959	1.0	1.5	1.8	5	9.5	11.9	12.4	13.0	8.6	10.7	12.0	14.3	14.8	15.4
SCS-862-14	725023	1.0	1.6	1.9	5.5	10.0	12.9	13.4	14.0	9.3	11.5	12.9	15.4	16.0	16.6
SCS-862-15	724967	1.0	1.7	2.0	5.9	10.6	13.7	14.3	15.0	10.0	12.4	13.9	16.6	17.3	17.9
Passband Flatness: ± 0.4 dB (SCS-862-02 to 13) ± 0.6 dB (SCS-862-14 and 15) Return Loss I/O: 8/16dB (SCS-862-02 to 13) 16/16 dB (SCS-862-14 and 15)										Specification Document Number 600662					



Table 69 SCS-*R Series Forward Cable Simulators Specifications

Insertion Loss in dB at Frequency (MHz)																	
Model	Part Number	40	45	50	72	108	150	211	250	300	350	400	450	550	750	870	1003
SCS-1-R	531161-001-00	-1	-1	-1	-1.1	-1.1	-1.2	-1.3	-1.4	-1.5	-1.6	-1.6	-1.7	-1.8	-2	-2.1	-2.2
SCS-2-R	531161-002-00	-0.9	-1	-1	-1.2	-1.3	-1.5	-1.7	-1.8	-2	-2.1	-2.2	-2.4	-2.6	-3	-3.2	-3.5
SCS-3-R	531161-003-00	-0.9	-0.9	-1	-1.2	-1.4	-1.7	-2	-2.2	-2.5	-2.7	-2.8	-3	-3.4	-4	-4.3	-4.7
SCS-4-R	531161-004-00	-0.9	-0.9	-1	-1.3	-1.5	-1.9	-2.4	-2.7	-2.9	-3.2	-3.5	-3.7	-4.2	-5	-5.4	-5.9
SCS-5-R	531161-005-00	-0.8	-0.9	-1	-1.4	-1.6	-2.2	-2.7	-3.1	-3.4	-3.8	-4.1	-4.4	-5	-6	-6.5	-7.2
SCS-6-R	531161-006-00	-0.8	-0.9	-1	-1.4	-1.8	-2.4	-3.1	-3.5	-3.9	-4.3	-4.7	-5.1	-5.8	-7	-7.7	-8.4
SCS-7-R	531161-007-00	-0.7	-0.9	-1	-1.5	-1.9	-2.6	-3.4	-3.9	-4.4	-4.9	-5.3	-5.7	-6.5	-8	-8.8	-9.7
SCS-8-R	531161-008-00	-0.7	-0.9	-1	-1.6	-2	-2.9	-3.8	-4.3	-4.9	-5.4	-5.9	-6.4	-7.3	-9	-9.9	-10.9
SCS-9-R	531161-009-00	-0.7	-0.8	-1	-1.7	-2.2	-3.1	-4.1	-4.7	-5.4	-6	-6.5	-7.1	-8.1	-10	-11	-12.1
SCS-10-R	531161-010-00	-0.6	-0.8	-1	-1.7	-2.3	-3.3	-4.5	-5.1	-5.9	-6.5	-7.2	-7.8	-8.9	-11	-12.1	-13.4



Table 70 T-CS-*Q Series Cable Simulators Specifications

Specification	Frequency (MHz)	T-CS-2-Q	T-CS-4-Q	T-CS-6-Q	T-CS-8-Q	T-CS-10-Q	T-CS-12-Q	T-CS-15-Q	T-CS-18-Q	T-CS-21-Q
Cable Simulator Value (dB nominal)	1218	2.0	4.0	6.0	8.0	10.0	12.0	15.0	18.0	21.0
Drop Insertion Loss* (dB max.)	5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	50	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.4
	85	0.2	0.2	0.3	0.3	0.5	0.6	0.6	0.7	0.9
	104	0.2	0.3	0.5	0.5	0.7	0.8	1.0	1.1	1.3
	300	0.6	1.4	1.9	2.2	3.1	3.3	3.9	4.5	5.3
	450	1.0	2.2	3.0	3.7	5.1	5.4	6.5	7.4	8.6
	550	1.3	2.7	3.7	4.7	6.3	6.8	8.1	9.4	11.0
	750	1.7	3.4	4.9	6.5	8.4	9.2	11.3	13.2	16.0
	870	1.9	3.8	5.5	7.5	9.3	10.5	13.3	15.7	18.8
	1000	2.1	4.1	6.1	8.3	10.2	11.7	1.2	18.2	21.0
	1218	2.3	4.4	6.7	9.3	11.0	12.7	1.1	19.0	21.5
Forward Response Flatness (dB max.)	—	± 0.5	± 0.5	± 0.5	± 0.5	± 0.7	± 0.7	± 0.7	± 0.8	± 0.8

*The insertion loss specifications shown are in addition to the tap value loss.

INPUT CONFIGURATION MODULES AND OUTPUT DISTRIBUTION ACCESSORIES SPECIFICATIONS

Directional couplers, also known as TAPs, split the RF signal into unequal portions, routing the low loss and high loss signals to different legs of the plug-in location. By rotating SDC8, SDC12, 7-DC-8, and 7-DC-12 180°, the signal flow is reversed. Splitters deliver half the RF signal to each leg of the plug-in location. The SPB-0 and NPB-0 are throughput plug-ins that do not effect the signal.



Table 71 D-Series Splitters and Directional Couplers (TAPs) Specifications

Model	P/N	Description	Insertion Loss
7-DC-4-5-1000-WC	724247	Splitter	4/4dB
7-DC-8-5-1000-WC	724754	Directional coupler (TAP)	8/2.6dB (±0.5dB)
7-DC-12-5-1000-WC	724771	Directional coupler (TAP)	11.9/1.8 dB (±0.5dB)



Table 72 S-Series Distribution Accessories Specifications

Model	P/N	Description	Insertion Loss in dB at Frequency (MHz)									
			5	40	54	70	80	222	550	750	862	1002
NPB-0	NPB-xxx	jumper	0	0	0	0	0	0	0	0	0	0
SPB-0	162260-00	jumper	0	0	0	0	0	0	0	0	0	0
SS-1000-2	723993	splitter	3.5	3.3	3.3	3.3	3.3	3.5	3.7	3.8	4.0	4.2
SDC-1000-8	724186	directional coupler	1.7 8.2	1.4 8.1	1.4 8.1	1.4 8.1	1.5 8.1	1.6 8.2	1.8 8.2	2.0 8.2	2.6 8.5	2.7 8.6
SDC-1000-12	724268	directional coupler	0.9 12.3	0.7 12.3	0.7 12.3	0.7 12.3	0.7 12.3	0.8 12.3	1.0 12.3	1.3 12.3	1.7 12.4	1.8 12.5
Passband Flatness: 0.5dB, P-V The recessed groove indicates the high loss leg. These accessories are reversible.								Specification Document Number 600613				



Table 73 SP/DC-100 Distribution Accessories Specifications

Model	Part Number	Description	Port	Passband (MHz)	Return Loss (dB)	Insertion Loss Max. (dB)	Flatness P-V (dB)	Isolation (dB)
SP100	531230-001-00	Splitter		5-1003	16	5	1	18
DC100/8	531230-002-00	8dB Directional Coupler	Through	5-1003	20	3.3	0.75	20
			Coupled		18	8.5	1	
DC100/10	531230-003-00	10dB Directional Coupler	Through	5-1003	20	2.5	0.5	20
			Coupled		19	10.5	0.75	
DC100/12	531230-004-00	12dB Directional Coupler	Through	5-1003	18	2.2	0.5	21
			Coupled		18	12.5	1	



Table 74 Splitter Specifications

Model	P/N
S3.5/3.5	724486
Bandwidth: 5-862MHz Insertion Loss: 2 x 3.8dB (max., 862MHz) Flatness: ± 0.25 dB Return Loss: > 20dB (47MHz) to 1.5dB/oct. (> 20dB (< 47MHz)) Isolation (out 1-out 2): > 20dB Dimensions L x H: 30 x 37.7mm	

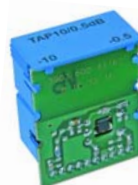


Table 75 TAPs Specifications

Model	P/N	Insertion Loss: Out 1/Out 2, dB
TAP10/1	724717	10.5/1.5
TAP1/10	725693	1.5/10.5
TAP8/1.5	724779	2/8.5
TAP16/1	724829	16.5/1
TAP1/16	725858	1/16.5
Bandwidth: 5-862MHz Flatness: ± 0.25 dB Return Loss: > 20dB (47MHz) to 1.5dB/oct. (> 20dB (< 47MHz)) Isolation (out 1-out 2): > 20dB Dimensions L x H: 30 x 37.7mm		

DIPLEX FILTERS SPECIFICATIONS

Diplex filters split the RF frequency, routing the low frequency to the return path and the high frequency to the forward path, with minimal signal loss. Select the diplex filter with the same frequency split as your network.

Table 76 42/54 MHz Diplex Filters (p/n 1504997) Specifications

Specification	Forward	Return
Insertion Loss, dB (typical)	1.17@54 MHz 0.41@750 MHz 0.41@862 MHz 0.74@1002 MHz	1.3@42 MHz
Return Loss, dB (typical)	25.6@54-850 MHz 23.5@850-1002 MHz	26.6@5-42 MHz
Isolation, dB (typical)	40.2@42-54 MHz 55.1@54-250 MHz 47.2@250-555 MHz 37.7@555-750 MHz 32.6@750-1002 MHz	49.8@5-42 MHz

Table 77 85/102 MHz Diplex Filters (p/n 1508618) Specifications

Specification	Forward	Value
Insertion Loss, dB (typical)	1.3@102 MHz 0.3@770 MHz 0.4@862 MHz 0.5@1002 MHz	1.2@85 MHz
Return Loss, dB (typical)	23@102-140 MHz 140-1002 MHz	22@5-50 MHz 18@50-85 MHz
Isolation, dB (typical)	31.5@85-105 MHz 52@102-195 MHz 48@195-600 MHz 41@600-770 MHz 36@770-1002 MHz	53@5-85 MHz

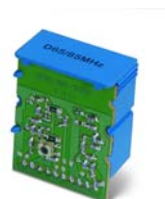
Table 78 1508883 Series Diplex Filters Specifications

Specification	Forward	Return
1508883-001, 42/54 MHz Filter		
Bandwidth, MHz	54-1218	5-42
Insertion Loss @ cut off, dB	1.1 max.	1.1 max.
Insertion Loss@1.2 GHz, dB	0.95 max.	—
Flatness, dB	0.8@54-1218 MHz	0.6@5-42 MHz
Roll-off, Low, dB	0.8@54-85 MHz	0.85@27-42 MHz
Roll-off, High, dB	0.35@1002-1218 MHz	—
Return Loss, dB	-22@54-750 MHz -20@750-1218 MHz	-22@5-42 MHz
Floor Isolation, dB	50@54-600 MHz (min.) 45@600-1002 MHz (min.) 40@1002-1218 MHz (min.)	50@5-42 MHz (min.)
Crossover Isolation, dB	37@42-54 MHz (min.)	—
Group Delay, nSec	18@55.25-58.83 MHz (max.)	11@39-40.5 20@40.5-42
1508883-002, 65/85 MHz Filter		
Bandwidth, MHz	85-1218	5-65
Insertion Loss @ cut off, dB	1.0 max.	1.1 max.
Insertion Loss@1.2 GHz, dB	0.95 max.	—
Flatness, dB	0.7@85-1218 MHz	0.6@5-65 MHz
Roll-off, Low, dB	0.7@85-115 MHz	0.7@50-65 MHz
Roll-off, High, dB	0.35@1002-1218 MHz	—
Return Loss, dB	-22@85-750 MHz -19@750-1218 MHz	-22@5-65 MHz
Floor Isolation, dB	50@85-600 MHz (min.) 45@600-1002 MHz (min.) 40@1002-1218 MHz (min.)	50@5-65 MHz (min.)
Crossover Isolation, dB	37@65-85 MHz (min.)	—
Group Delay, nSec	9@62-63.5 14@63.5-65	4@112.25-116.68 MHz (max.)
1508883-003, 85/102 MHz Filter		
Bandwidth, MHz	102-1218	5-85
Insertion Loss @ cut off, dB	1.2 max.	1.2 max.
Insertion Loss@1.2 GHz, dB	0.9 max.	—
Flatness, dB	0.9@102-1218 MHz	0.7@5-85 MHz
Roll-off, Low, dB	0.9@102-200 MHz	0.9@60-65 MHz
Roll-off, High, dB	0.3@1002-1218 MHz	—

Table 78 1508883 Series Diplex Filters Specifications (cont'd)

Specification	Forward	Return
Return Loss, dB	-22@102-750 MHz -19@750-1218 MHz	-22@5-85 MHz
Floor Isolation, dB	50@102-600 MHz (min.) 45@600-1002 MHz (min.) 40@1002-1218 MHz (min.)	50@5-85 MHz (min.)
Crossover Isolation, dB	37@65-85 MHz (min.)	—
Group Delay, nSec	14.5@103.25-106.85 5.5@112.25-116.68	8@82-83.5 MHz (max.) 11@83.5-85 MHz
1508883-004, 204/258 MHz Filter		
Bandwidth, MHz	258-1218	5-204
Insertion Loss @ cut off, dB	1.0 max.	1.0 max.
Insertion Loss@1.2 GHz, dB	0.9 max.	—
Flatness, dB	0.7@258-1218 MHz	0.6@5-204 MHz
Roll-off, Low, dB	0.8@258-285 MHz	0.7@170-204 MHz
Roll-off, High, dB	0.3@1002-1218 MHz	—
Return Loss, dB	-22@258-600 MHz -19@600-1218 MHz	-22@5-204 MHz
Floor Isolation, dB	50@258-600 MHz (min.) 45@600-1002 MHz (min.) 40@1002-1218 MHz (min.)	50@5-204 MHz (min.)
Crossover Isolation, dB	37@204-258 MHz (min.)	—
Group Delay, nSec	5@259.25-263.68	7@198-204 MHz (max.)

Table 79 Diplex Filter Specifications



Model	P/N
D30/47	725171
D42/54	725483
D55/70	772506
D65/85	724120

Table 80 Diplex Filter for FM401 Specifications



Model	P/N
D30/47	761846
D42/54	761845
D55/70	761844
D65/85	725932
D85/105	791127

Active and Passive Return Channel Amplifier

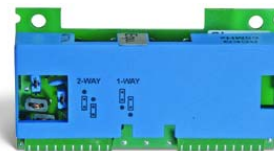
The module RCA3-Z is a universal reverse path amplifier for Flex Max 400 and Flex Max 500 amplifiers. The functional adjustment possibilities enable a universal usage in HFC networks. All adjustments can be performed by Amini PADs. A switchable attenuator enables a reduction of the gain by 6dB. The roll off caused by the diplex filters is compensated by special circuitry, where the gain at the higher frequency is increased by 1.5dB. The whole range from 5MHz to 30/42/65MHz can be used for reverse path signals.

Table 81 RCA3-Z Active Return Channel Amplifiers Specifications



Model	P/N	
RCA3-Z 25/65	724110	
RCA3-Z 25/55	772505	
RCA3-Z 25/42	725656	
RCA3-Z 25/30	725440	
Bandwidth		5–30MHz
Gain (module input to output)		
Flatness		±0.25 dB
Combiner insertion loss		<4.5 dB
Return Loss		≤20 dB
Noise Figure		<6 dB
Attenuator		
Input/Output		Amini plug-in modules 0,1,2,...20dB
Interstage		(switchable with a Jumper) 0,6 dB
Equalizer (5-65MHz)		Amini plug-in modules 0,1,2,...20 dB
Power Consumption		<1.5W
Power Supply		24VDC/60mA
Operating Temperature		–20°C to 75°C
Dimensions L x H		75 x 42mm

Table 82 RCEQ-Z Passive Return Channel Equalizer Specifications



Model	P/N	
RCEQ-Z-2/65	725973	
Bandwidth		5–65MHz
Return Loss		≤20 dB
Insertion Loss: 1 input/2 input config.		≤1.0dB @ 65MHz/≤5.0dB @ 65MHz
Slope: delta insertion loss (5–65MHz)		Amini plug-in modules (1dB steps) 0–20dB (measured in station Max-Amplif. incl. D65/85MHz)
flatness:		≤0.25 dB
Attenuator		Amini plug-in modules (1dB steps)
Power Consumption		<1.5W
Input Splitter		on board 1 input/2 input config. via bridges
Dimensions L x H		75 x 42mm

AUTOMATIC GAIN CONTROL (AGC) MODULES SPECIFICATIONS

Table 83 AGC Modules Specifications



Model	P/N
AGC030/191.25	758515
AGC030/189.25	724714
AGC030/182.25	725108
AGC030/175.25	758642

FREQUENCY CORRECTION MODULES SPECIFICATIONS

Within a longer cascade of amplifiers and passive network components it can be necessary to correct irregularities of the frequency response. The CM862/xx is a plug-in module that equalizes the frequency response of longer cascades or non-optimal transmitter-node combinations with two bumpers and two debumpers, which can be shifted in frequency and amplitude. One of each is responsible for the high and low frequency ranges. An additional fixed bump in the CM862/85MHz, CM862/54MHz, and CM862/47MHz modules compensates the roll off of 4 diplexers (i.e. one CM862 is enough for 2 amplifiers).

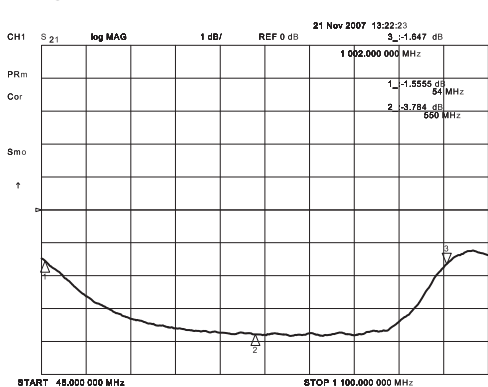
Table 84 CM862 System Equalizer Specifications

Model	P/N
CM862/00	772504
CM862/85	724571
CM862/54	772503
CM862/47	772502

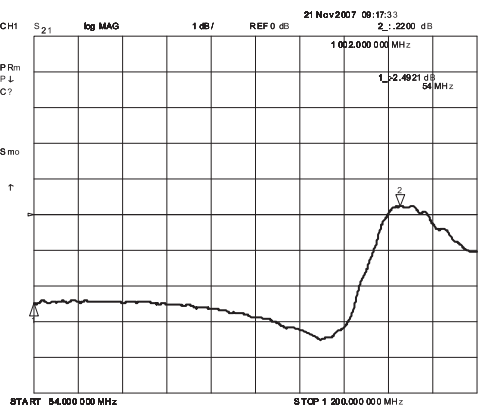
Table 85 Fixed-Value EDB Response Equalizers Specifications

P/N	Attenuated Range	Max. Bump or Trap Size	Location of Bump or Trap
1504415-001	54 to 1002MHz	3.5dB	54 to 1002MHz
1504416-001	45 to 1002MHz	3.5dB	950 to 1002MHz
1503691-001	54 to 1002MHz	3.5dB	54 to 1002MHz
1503691-002	45 to 1002MHz	3.5dB	950 to 1002MHz

Example Peak-to-Valley Response for Haystacks (727397/789316/761842)



Example Peak-to-Valley Response for Peaking Circuits (727398/761843)



Ordering Information

To configure a product that meets your specific needs, or for any questions, please contact your ARRIS Sales Professional. You may visit <http://www.arris.com/Support> for additional support options. If you do not have a user ID and password or have forgotten your password, please click the Create/Update Membership button.

Revision History

Revision	Date	Reason for Change
A	03/2019	Initial Agile release.
B	11/2019	Revised to correct insertion Loss for CBSM-1G-07 at 900 MHz to 6.37 dB.

