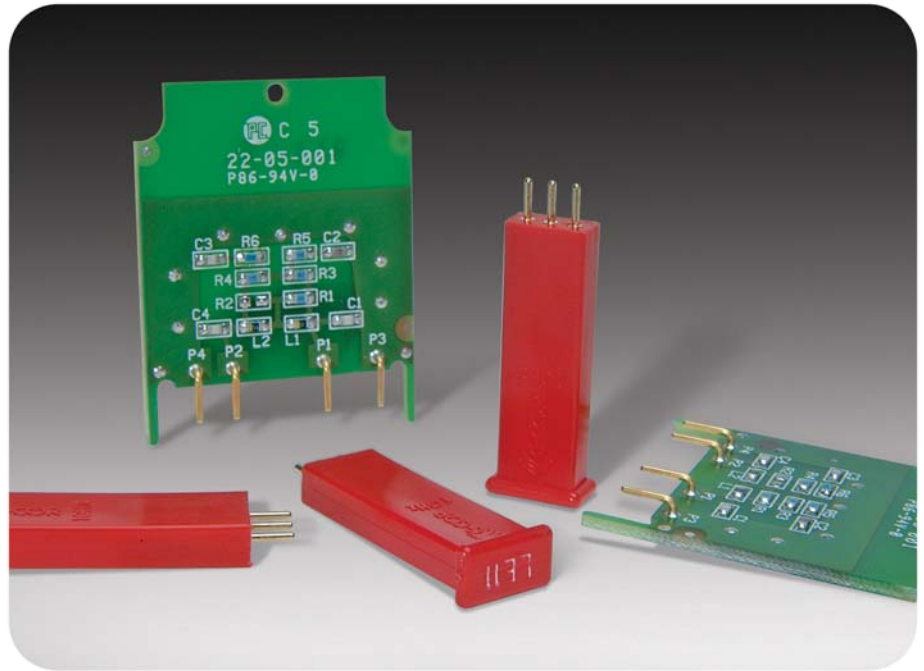




HFC Product Accessories

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.

- 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

Options include:

- 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. The second section, *Accessories at a Glance*, lists all accessories with a photo 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-T ¹ 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-B ¹ Bridger	FMBEG	NPB	SEQ-1G SEQ862 SEQ750	SCS-1G	NPB ²	MEQ-42, 55, 65, 85 MEQT-42, 85	S-Series
FM601e-T Trunk ¹	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 Bridger ¹	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 Extender ¹	FM6E	10-A-WC THRM	PEQ-1G 7-2E852-WC 7-2E750-WC	PCS-1G	10-A-WC ²	7-REF42/x-WC	N/A
FM331-LE Line Extender ¹	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 Extender ¹	FM321G	10-A-WC THRM	PEQ-1G 7-2E862-WC 7-2E750-WC	PCS-1G	10-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.

Accessories by Product Line

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
SLE100 Line Extender	SLE100	JXP-*B	SFE-100-*-R	SCS-*	JXP-*B	SRE	SP100 DC100	SLE-ADU

Table 3 ARRIS Optical Products

Model	P/N Prefix	Forward PADS	Forward Equalizers	Cable Simulators	Return PADS	Output Distribution Accessories
CHP Dual TX		Amini Short	CHP Plug-in EQ	N/A	N/A	N/A
CHP Single TX		CHP PAD	N/A	N/A	N/A	N/A
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 OM3101	OM31C	10-A-WC ¹	GEQL-1GHZ-xxx-1 GEQL-870-xxx-1	N/A	10-A-WC	7-DC-Series
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
Opti Max OM2700¹	OM27	NPB	GEQL-1GHZ GEQL-870 GEQC-1GHZ GEQC-870 SEQ-1G SEQ-870 SEQ-750	SCS-1G	NPB	S-Series
Opti Max OM2100	OM21G	NPB Amini	GEQL-1GHZ GEQL-870	N/A	NPB Amini	NPB/Amini 7-DC-Series
Opti Max OM1111	OM11G	10-A-WC ¹	GEQL-1GHZ-xxx-1 GEQL-870-xxx-1	N/A	10-A-WC	N/A

Key
 N/A: not applicable
 W/O: without covers
 WC: with covers

1. D30/47, D42/54, D55/70, D65/85 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.

Accessories by Product Line

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 4 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, D55/70, D65/85 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.

Accessories at a Glance

Table 5 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				

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.

Accessories at a Glance

Table 6 Legacy Optical Products

Model	P/N Prefix	Forward PADS	Forward Equalizers	Cable Simulators	Return PADS	Return Equalizers	Output Distribution Accessories
Opti Max4000	OM41G	NPB	NEQL-870	N/A	NPB ¹	N/A	N/A
Opti Max3000		10-A-WC 9-A-S (RX only)	7-TG862-WC	N/A	10-A-WC ¹	N/A	N/A
Opti Max2000 ^{2,3}		Amini	Amini	N/A	Amini	Amini	N/A
Opti Max1220		Amini	N/A	N/A	Amini	N/A	7-DC-Series
Opti Max1000		10-A-WC	7-2E862/x-WC	7-2E862C-WC	10-A-WC ¹	N/A	N/A
Optiworx ISX3040 Optiworx ISX3025		IPADxxx	ISX750EQyy ISX870EQyy IX7EQyy IX8EQyy	N/A	IPADxxx	ISX750EQyy ISX870EQyy IX7EQyy IX8EQyy	N/A
Optiworx ISX3030		TPADxxx	ISX750EQyy	N/A	TPADxxx	ISX750EQyy	N/A
LN-SM3x		IPB	N/A	N/A	N/A	N/A	S-Series
LN-SM7x		SPB	SEQ-750	SCS-862	SPB	SM-MEQF42 MEQ-42 MEQT-42	S-Series
Key	N/A: not applicable						
	W/O:without covers		WC:with covers				

- Noise Filter may be used in the Return PAD location.
- Legacy D30/47, D42/54, D55/70, D65/85 plug-in duplex filters are available.
- CM862 and A862 control modules are available.

Table 7 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.
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.

Accessories at a Glance

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



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



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



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



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



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



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



Accessories at a Glance

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.

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



GEQL-1GHZ-xxx Linear Equalizers

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

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



GEQL-870-xxx Linear Equalizers

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

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



Accessories at a Glance

NEQL-870-xx Linear Equalizers

Legacy Product Usage: Opti Max4000

Notes:

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



7-TG862-WC Linear Equalizers

Legacy Product Usage: Opti Max3000

Notes:

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



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
2. Blue plastic cover to protect components



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



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



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



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 Max601 Bridger & Line Extender, Flex Max321, Flex Max320, Diamond Line I & II, Opti Max1000

Notes:

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



Accessories at a Glance

GEQC-1GHZ-xxx Cable Equalizers

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



GEQC-870-xxx Cable Equalizers

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



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



FEQC-1G-xx Series Cable Equalizers

Product Usage: Flex Max FM401

Notes:

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



FEQC-870-xx Series Cable Equalizers

Product Usage: Flex Max FM401

Notes:

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



FEQC-750-xx Series Cable Equalizers

Product Usage: Flex Max FM401

Notes:

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



SRE Return Cable Equalizers

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

Notes:

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



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

Product Usage: Flex Max FM401

Notes:

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



SCS Forward Cable Simulator

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

Notes:

1. STARLINE amplifiers
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



CHP Plug-In Equalizers

Product Usage: CHP Dual TX

Notes:

1. Height is 0.6"
2. Molded white plastic



SCS-1G-xx Cable Simulators

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

Legacy Product Usage: Flex Max901

Note:

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



SCS862-xx Cable Simulators

Legacy Product Usage: Flex Max900, Flex Max340, Flex Max330, 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



PCS-1G-xx Cable Simulators

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

Legacy Product Usage: Flex Max601 Bridger & Line Extender, Flex Max321, Flex Max320

Note:

1. Blue plastic cover to protect components



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.



CE862/xx Cable Simulators (Equivalents)

Legacy Product Usage: Flex Max220 Plus

Note:

1. Blue plastic cover to protect components



CBSM-1G Series Cable Simulators

Product Usage: Flex Max FM401

Notes:

1. Height is 1.4"
2. Molded white plastic

Picture
Coming
soon

SS/SDC-1000-xx Distribution Accessories

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

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

Note:

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



SP/DC-100 Distribution Accessories

Product Usage: MB100, SLE100

Note:

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



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

Product Usage: Flex Max FM601e-T/B, Flex Max FM401, Opti Max OM3101, Opti Max OM2100

Legacy Product Usage: Flex Max601 Bridger, Flex Max222, Diamond Line I & II, GNA/TNA, Opti Max1220

Note:

1. Blue cover to protect components and insertion guides



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



Ingress Noise Filter (tall)

Product Usage: Flex Max FM401

Legacy Product Usage:

Notes:

1. Height is 1.4", 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

Picture
Coming
soon

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

Product Usage: Flex Max FM401

Legacy Product Usage: Opti Max2100, Opti Max2000, Opti Max1220, Flex Max500, Flex Max400, Flex Max220 Plus

Note:

1. Blue plastic cover to protect components



Signature Correction Plug-ins

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

Picture
Coming
soon

Signature Correction Plug-ins Response EQs

Product Usage: Flex Max FM601e

Picture
Coming
soon

CM862/xx System Equalizer

Legacy Product Usage: Opti Max2000



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 8 NPB Series Forward/Return Path PAD Attenuators

Model	P/N	5-1002MHz Flat Loss (dB)	Passband Flatness (dB)	Model	P/N	5-1002MHz Flat Loss (dB)	Passband Flatness (dB)
NPB-000	724165	0.0	±0.2	NPB-110	724227	11.0	±0.3
NPB-010	724312	1.0	±0.3	NPB-120	724228	12.0	±0.3
NPB-020	724258	2.0	±0.3	NPB-130	724245	13.0	±0.3
NPB-030	724246	3.0	±0.3	NPB-140	724250	14.0	±0.3
NPB-040	724235	4.0	±0.3	NPB-150	724267	15.0	±0.4
NPB-050	724189	5.0	±0.3	NPB-160	724333	16.0	±0.4
NPB-060	724191	6.0	±0.3	NPB-170	724344	17.0	±0.4
NPB-070	724167	7.0	±0.3	NPB-180	724353	18.0	±0.4
NPB-080	724171	8.0	±0.3	NPB-190	724390	19.0	±0.4
NPB-090	724200	9.0	±0.3	NPB-200	724407	20.0	±0.4
NPB-100	724199	10.0	±0.3	NPB-750	726163	terminator	—

Flatness measured relative to a straight line at the listed dB value.
Return Loss I/O: 20/20dB min.
All in green plastic.

Specification Document Number 601263



Table 9 SPB Series Forward/Return PAD Attenuators

Model	P/N	5-1002 MHz Flat Loss (dB)	Model	P/N	5-1002 MHz Flat Loss (dB)	Model	P/N	5-1000 MHz Flat Loss (dB)
SPB-0	724681	0.0	SPB-7	724879	7.0	SPB-14	725057	14.0
SPB-1	724789	1.0	SPB-8	724929	8.0	SPB-15	725034	15.0
SPB-2	724844	2.0	SPB-9	724919	9.0	SPB-16	725142	16.0
SPB-3	724720	3.0	SPB-10	724867	10.0	SPB-17	725147	17.0
SPB-4	724784	4.0	SPB-11	724927	11.0	SPB-18	725123	18.0
SPB-5	724830	5.0	SPB-12	724994	12.0	SPB-19	725094	19.0
SPB-6	724913	6.0	SPB-13	724896	13.0	SPB-20	725192	20.0
Passband Flatness: ± 0.3 dB Return Loss I/O: 19/19 dB min. All in green plastic.						Specification Document Number 600437		



Table 10 RPB Series Return PAD Attenuators (reverse SPB-style PAD)

Model	P/N	5-200 MHz Flat Loss (dB)	Model	P/N	5-200 MHz 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: 25/25 dB min. All in red plastic.				Specification Document Number 600701	



Table 11 SEQPB Series EQ Form Factor PAD Attenuators

Model	P/N	5-1002 MHz Flat Loss (dB)	Model	P/N	5-1002 MHz 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: 19/19 dB min. (SEQPB-01 to 06) 18.5/18.5 dB min. (SEQPB-07 to 010) Slope: -0.2 to -0.7 dB				Specification Document Number 600668	



Table 12 JXP Series Forward/Return PAD Attenuators

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 13 9-A-S Series Forward/Return PAD Attenuators

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	±0.1	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 14 10-A-L/10-A-WC Series Forward/Return PAD Attenuators

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
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.				<i>Specification Document Number 871371</i>			

Table 15 Amini PAD Attenuators



Model	P/N	Atten. 5–862MHz Flat Loss in dB	Forward Path EQ, 65/85MHz 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 16 Amini Short PAD Attenuators



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 17 Thermal PAD Attenuators



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

Table 18 Bridge and A862 Attenuators



Model	P/N	PAD Value	Flatloss 5–862 MHz	Passband Flatness
Bridge (A862/0)	724739	0	0	± 0.15 dB
A862/02	725444	2	2	± 0.15 dB
A862/04	725672	4	4	± 0.15 dB
A862/05	778925	5	5	± 0.15 dB
A862/06	725218	6	6	± 0.15 dB
A862/08	725641	8	8	± 0.15 dB
A862/10	725868	10	10	± 0.15 dB
Dimensions, L x H: 30 x 37.7 mm. All in blue plastic.				

Noise Filter

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 19 Return Ingress Noise Filter 15 MHz (P/N 724577)

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.	\leq -18
Stop Band	
Bandwidth, MHz	5–10
Attenuation, dB	\geq 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.	<i>Specification Document Number KR012940</i>

Table 20 FM401 Return Ingress Noise Filter 15 MHz (P/N 789307)

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.	\leq -18
Stop Band	
Bandwidth, MHz	5–10
Attenuation, dB	\geq 30
In some cases, the ingress filter may have to be inserted or removed with needlenose pliers.	<i>Specification Document Number 1505819</i>

Plug-in Equalizers

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. GEQLs, NEQLs, and 7-TG862-WCs are linear equalizers. SEQs, 7-2E862/x-WCs, MEQs, and MEQTs 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 21 GEQL-1GHZ-xxx and GEQL-1GHZ-xxx-1 Series Linear Equalizers

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 22 GEQL-87-xxx and GEQL-870-xxx-1 Series Linear Equalizers

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: ± 0.3 dB
 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 23 NEQL-870 Series Linear Equalizers

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: 18/18dB min.
 Flatness measured with respect to slope.
 All in yellow plastic.

Specification Document Number 601264



Table 24 7-TG862-WC Series Linear Equalizers

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
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



Table 25 SFE Series Forward Cable Equalizers

		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



Table 25 SFE Series Forward Cable Equalizers

(cont'd)

Insertion Loss in dB at Frequency (MHz)												
Model	Part Number	50	65	85	200	300	450	550	650	750	870	1003
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 26 SEQ-1G Series Cable Equalizers

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	5.4	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
SEQ-1G-20	724502	20.0	18.2	17.7	14.2	11.2	9.3	7.6	6.0	4.4	2.6	.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 Specification Document Number 1500769					



Table 27 PEQ-1G Cable Equalizers

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
Passband Flatness: ±0.3dB (PEQ-1G-02 to 18) ±0.4dB (PEQ-1G-19 and 20)											Specification Document Number 1503587		
Return Loss I/O: 18/18dB min. (PEQ-1G-02 to 18) 16/16dB min. (PEQ-1G-19 and 20)													



Table 28 1GHz Equalizer for CHP Max™ Headend Optics Platform

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

Table 29 GEQC-870 Cable Equalizers



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 30 GEQC-1GHz Cable Equalizers



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 31 SEQ-862 Series Cable Equalizers



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

Table 31 SEQ-862 Series Cable Equalizers



(cont'd)

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-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: ± 0.3 dB Return Loss I/O: 20/18dB min.						Specification Document Number 600438 Rev J					



Table 32 7-2E862/x-WC Forward Path Cable Equalizers

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	
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 33 E862 Series Cable Equalizers

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 34 SEQ-750 Series Cable Equalizers

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: ± 0.3 dB Return Loss I/O: 18/16dB min.							<i>Specification Document Number 600563</i>				



Table 35 MEQ-85 and MEQT-85 Series Return Cable Equalizers

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		85	5	85	550	750
MEQ-85-2	775422	1.98	2.50	1.30	—	—	—	—	
MEQ-85-3	775423	2.97	2.50	2.60	—	—	—	—	
MEQ-85-4	775424	4.03	2.50	4.00	—	—	—	—	
MEQ-85-5	775425	5.01	2.50	5.30	—	—	—	—	
MEQ-85-6	775426	6.00	2.50	6.60	—	—	—	—	
MEQ-85-7	775427	7.06	2.50	8.00	—	—	—	—	
MEQT-85-2	775428	3.48	1.00	1.30	4.01	3.14	2.96	1.91	
MEQT-85-3	775429	4.47	1.00	2.60	5.04	3.28	3.92	1.81	
MEQT-85-4	775430	5.53	1.00	4.00	6.13	3.43	4.96	1.71	
MEQT-85-5	775431	6.51	1.00	5.30	7.15	3.57	6.02	1.72	
MEQT-85-6	775432	7.50	1.00	6.60	8.17	3.71	7.08	1.72	
MEQT-85-7	775433	8.56	1.00	8.00	9.27	3.86	8.02	1.62	
Passband Flatness: ±0.2dB (MEQ-85, MEQT-85-2 to 4) ±0.3dB (MEQT-85-5 to 7) Return Loss I/O: 18/16dB min.				MEQ-85 Specification Document Number 1504358 MEQT-85 Specification Document Number 1504359					



Table 36 MEQ-65 Series Return Cable Equalizers

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: ±0.1dB Return Loss I/O: 18/16dB min.				Specification Document Number 600615					



Table 37 MEQ-42 and MEQT-42 Series Return Cable Equalizers

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 38 MEQ-55 Series Return Cable Equalizers

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 39 FEQC-1GHz Series Cable Equalizers

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:		Specification Document Number 1504826										
22/22 dB min. (FEQC-1G-02 to 20)												
20/20 dB min. (FEQC-1G-21 to 24)												
Tolerance:		Specification Document Number 1504826										
±0.3dB (FEQC-1G-02 to 20)												
±0.5dB (FEQC-1G-21 to 24)												



Table 40 FEQC-870MHz Series Cable Equalizers

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	0.75
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							<i>Specification Document Number 1505648</i>				



Table 41 FEQC-750MHz Series Cable Equalizers

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							<i>Specification Document Number 1505649</i>				



Table 42 REQC-85MHz Series Cable Equalizers

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 43 REQC-65MHz Series Cable Equalizers

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: 22/22dB min. Tolerance: ±0.3dB						Specification Document Number 1504827				



Table 44 REQC-42MHz Series Cable Equalizers

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: 22/22dB min. Tolerance: ±0.3dB				Specification Document Number 1505737			

Picture
Coming
soon

Table 45 CBSM-1GHz Series Cable Equalizers

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	56.37	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: ±0.3dB				Specification Document Number 1505004								

Picture
Coming
soon

Table 46 E606 Series Cable Equalizer

Model	P/N	PAD Value	Insertion Loss in dB at Frequency (MHz)	
			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 47 7-REF42/x-WC Return Cable Equalizers

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 48 7-REF55/x-WC Return Cable Equalizers

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



Table 48 7-REF55/x-WC Return Cable Equalizers

(cont'd)

Model	P/N	PAD Value	Insertion Loss in dB at Frequency (MHz)								
			5	7	13	19	25	33	42	49	55
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 49 7-REF65/x-WC Return Cable Equalizers

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	4.0	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 50 7-REF85/x-WC Return Cable Equalizers

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.

Cable Simulators and Cable Equivalentents

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 51 SCS-*-R Series Forward Cable Simulators

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 52 SCS-1G Series Cable Simulators

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	1.0	1.1	1.2	1.2	1.3	1.3
SCS-1G-03	724380	1.0	1.1	1.1	2.3	2.6	2.7	2.8	3.0	1.5	1.7	1.9	2.2	2.3	2.5	2.6	2.5
SCS-1G-04	724391	1.0	1.1	1.2	2.9	3.4	3.6	3.7	4.0	2.2	2.6	2.9	3.2	3.5	3.8	3.9	3.8
SCS-1G-05	724389	1.0	1.2	1.3	3.6	4.3	4.4	4.6	5.0	2.9	3.4	3.9	4.3	4.7	5.0	5.2	5.0
SCS-1G-06	724331	1.0	1.2	1.3	4.2	5.1	5.3	5.5	6.0	3.6	4.2	4.8	5.3	5.7	6.2	6.4	6.3
SCS-1G-07	724361	1.0	1.3	1.4	4.9	5.9	6.2	6.4	7.0	4.7	5.4	6.0	6.6	7.1	7.4	7.7	7.6
SCS-1G-08	724367	1.0	1.3	1.5	5.5	6.7	7.0	7.3	8.0	5.4	6.2	6.9	7.6	8.2	8.6	8.9	8.8
SCS-1G-09	724372	1.0	1.4	1.5	6.1	7.5	7.9	8.2	9.0	6.2	7.1	7.9	8.7	9.4	9.8	10.2	10.0
SCS-1G-10	724369	1.0	1.4	1.6	6.8	8.3	8.7	9.1	10.0	7.0	8.0	8.9	9.8	10.6	11.1	11.5	11.3
SCS-1G-11	724402	1.0	1.5	1.7	7.4	9.2	9.6	10.0	11.0	7.8	8.9	9.9	10.9	11.8	12.3	12.8	12.5
SCS-1G-12	724393	1.0	1.5	1.7	8.1	10.0	10.5	10.9	12.0	8.5	9.8	11.0	12.0	13.1	13.6	14.1	13.8
Passband Flatness: ± 0.4 dB Return Loss I/O: 18/16dB min.												Specification 1500883					



Table 53 PCS-1G Series Cable Simulators

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 54 SCS-862 Series Cable Simulators

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: ±0.4dB (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 55 7-2E862Cx-WC Cable Simulators

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: ± 0.4 dB
 Return Loss I/O:
 16/16 dB (7-2E862C1 to C6)
 15/15 dB (7-2E862C7 and C12)

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Table 56 CE862 Cable Equivalent



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

Input Configuration Modules and Output Distribution Accessories

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 57 Splitter

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



Table 58 TAPs

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: ±0.25dB Return Loss: >20dB (47MHz) to 1.5dB/oct. (>20dB (<47MHz)) Isolation (out 1-out 2): >20dB Dimensions L x H: 30 x 37.7 mm		



Table 59 SP/DC-100 Distribution Accessories

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 60 D-Series Splitters and Directional Couplers (TAPs)

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



Table 61 S-Series Distribution Accessories

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	0
SPB-0	162260-00	jumper	0	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	4.0	4.0
SDC-1000-8	724186	directional coupler	1.6	1.4	1.4	1.4	1.5	1.6	1.8	2.0	2.6	2.7	
			8.2	8.1	8.1	8.1	8.1	8.2	8.2	8.2	8.5	8.6	
SDC-1000-12	724268	directional coupler	0.9	0.7	0.7	0.7	0.7	0.8	1.0	1.3	1.7	1.8	
			12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.4	12.5

Passband Flatness: 0.5dB, P-V
The recessed groove indicates the high loss leg. These accessories are reversible.

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Diplex Filters

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 62 Diplex Filter



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

Table 63 Diplex Filter for FM401

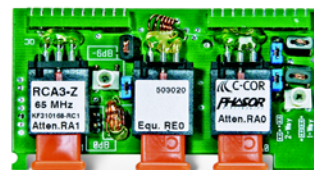


Model	P/N
D30/47	761846
D42/54	761845
D55/70	761844
D65/85	725932
D85/105	791127

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 5 MHz to 30/42/65 MHz can be used for reverse path signals.

Table 64 RCA3-Z Active Return Channel Amplifiers



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

Table 64 RCA3-Z Active Return Channel Amplifiers



(cont'd)

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

Table 65 RCEQ-Z Passive Return Channel Equalizer



Model	P/N	
RCEQ-Z-2/65	725973	
Bandwidth		5-65MHz
Return Loss		≤20dB
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:		≤0.25dB
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

Table 66 AGC Modules



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

Frequency Correction Modules

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 CM862/85 MHz, CM862/54 MHz, and CM862/47 MHz modules compensates the roll off of 4 diplexers (i.e. one CM862 is enough for 2 amplifiers).

Table 67 CM862 System Equalizer

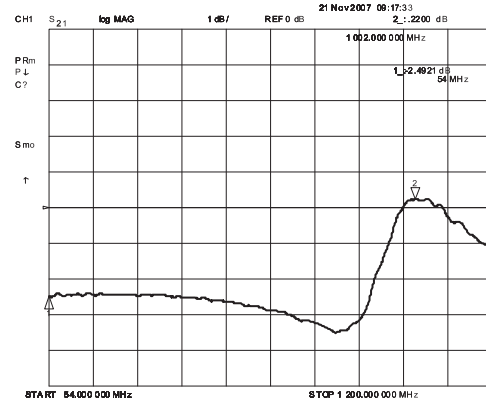
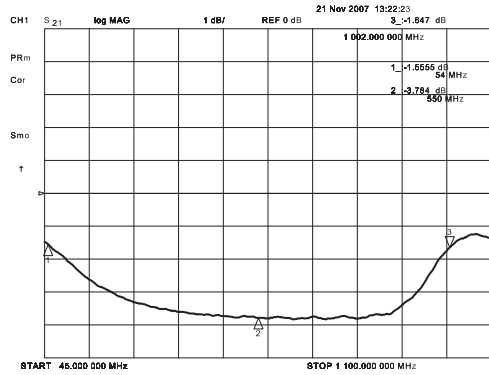
Model	P/N
CM862/00	772504
CM862/85	724571
CM862/54	772503
CM862/47	772502

Table 68 Fixed-Value EDB Response Equalizers

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 Peaking Circuits (727398/761843)

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



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.

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