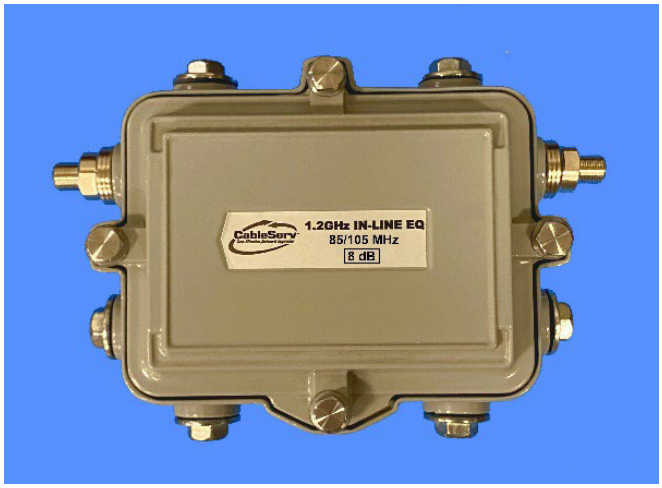
CableServ®
MID-SPLIT IN LINE EQUALIZERS 1.2 GHz

Product Description

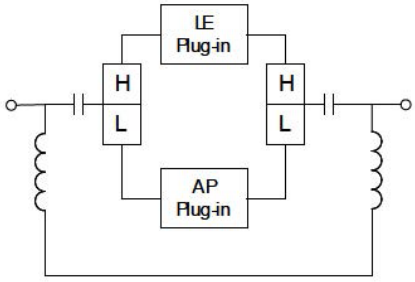
CEL 1.2 GHz IN-LINE EQ provides 12 amperes of current capacity and the flexibility of both a forward and a reverse path signal conditioning plug-in. The flexibility of an additional forward equalizer allows for easy system redesigns. System studies have shown that the addition of reverse band attenuation in strategic locations provides optimal support of reverse band services. Various plug-in combinations are available to accommodate the forward and reverse path equalization requirements of any system.

CEL 1.2 GHz IN-LINE EQ can withstand the most severe environmental conditions with the multi-step painting process. Additionally, the CEL 1.2 GHz IN-LINE EQ can withstand 6 kV combination wave surge per IEEE C62.41 Category B3.

- **Separate Plug-ins for the Forward and Return Paths**
- **6Kv Combination Surge Withstand on Input/Output Ports** - Surge withstand per IEEE C62.41 Category B3.
- **Forward Path Plug-in** - Allows the system designer to make adjustment to the system design equalizing only the forward path while adding minimum reverse path loss.
- **Reverse Path Return Plug-in** - The reverse path can be optimized by adding a plug-in reverse path attenuator. By adding attenuation in the reverse path, return signals such as cable modems can be operated at higher levels for improved signal-to-noise performance while preventing clipping and distortion in the optical return laser.
- **Reverse Path Optimization**
- 12 Amperes of Power Passing Capability - 12 A @ 90 VAC



CEL 1.2 GHz IN-LINE EQ BLOCK DIAGRAM



Product Specifications and Ordering Information:

Please contact CableServ at (905) 629-1111 or inquiries@cableserv.com

PRODUCT MODEL # CEL 1.2 GHz IN-LINE EQ			
Equalizer Value	**UNITS**	**8 dB**	**12 dB**
Forward Passband	MHz	102-1218	102-1218
Return Passband	MHz	5-85	5-85
Forward Specification			
Insertion Loss @ 102 MHz	-dB	8.5±1.0	12±1.0
Insertion Loss @ 120 MHz	-dB	7.8±0.85	10±0.85
Insertion Loss @ 250 MHz	-dB	6.8±0.85	9.5±0.85
Insertion Loss @ 550 MHz	-dB	5.2±0.85	7.1±0.85
Insertion Loss @ 750 MHz	-dB	4.1±0.75	5.9±0.85
Insertion Loss @ 870 MHz	-dB	3.5±0.75	4.2±0.85
Insertion Loss @ 1002 MHz	-dB	2.9±0.75	3.6±0.75
Insertion Loss @ 1218 MHz	-dB	2.0±0.75	2.0±0.75
Return Loss 102-1218 MHz	-dB	16	16
Group Delay (nS max/3.58 MHz)			
CH 97	nS	20	20
CH9 98	nS	10	10
CH 99 & UP	nS	5	5
Hum Modulation @ 10 A 102-1218 MHz	dBc	-60	-60
Return Specification			
Insertion Loss @ 5 MHz	-dB	1	1
Insertion Loss @ 45 MHz	-dB	1	1
Insertion Loss @ 85 MHz	-dB	1.7	1.7
Return Loss 5-10 MHz	-dB	16	16
Return Loss 11-85 MHz	-dB	18	18
Group Delay 5.0-6.5	nS	40	40
Group Delay 6.5-8.0	nS	20	20
Group Delay 8.0-9.5	nS	10	10
Group Delay 9.5-11.0	nS	7	7
Group Delay 80.5-82.0	nS	10	10
Group Delay 82.0-83.5	nS	15	15
Group Delay 83.5-85.0	nS	20	20
Hum Modulation @ 10 A 5-85 MHz	dBc	-55	-55

General	
Power Passing	12 amps @ 90 VAC
Nominal Impedance	75 Ω
Operating Temperature	-40 °C to 60 °C
Pressure Seal	15 psi
Surge Withstand	6 kV Combo Wave (IEEE 62.41-1991 Cat. B3)
	6 kV Ring Wave (IEEE 62.41-1991 Cat. A3)

Specifications are subject to change without notice.

Part Number	**Part Description**
824-523-708-0CE	CEL 1.2GHz IN-LINE EQ 8dB
824-523-712-0CE	CEL 1.2GHz IN-LINE EQ 12dB

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