

PCT LPIA-20A

POWER INSERTER



A line power inserter combines RF signal and 60 or 90 volts AC and is placed after a line power supply. It inserts power into the trunk or feeder lines to serve the active modules while providing isolation between the AC and RF networks. The 1.2 GHz frequency rating coupled with outstanding insertion loss and hum modulation characteristics, ensure their reliable performance in the most demanding applications and DOCSIS 3.1 compatibility.

- 1.2 GHz bandwidth with minimal insertion loss
- 100 dB RFI shielding ensures against ingress / egress interference
- Stainless steel hardware for corrosion resistance
- Aluminum alloy housing with weather resistant powder coating
- Weather seal gasket ensures water tight protection, tested at 15 psi

SPECIFICATIONS

GENERAL SPECIFICATIONS	
Nominal Impedance	75 Ohms
Power Passing	20 A, 90 VAC (In-Out)
Waterproof Condition	15 psi
Surge Withstand	All ports conforms to ANSI / SCTE 81 2012, IEEE C62.41-1991 Cat. B3 (6000 V, 3000 A, 1.2 / 50 μ s to 8/20 μ s Combination Wave)
Hum Modulation	-60 dB @ 10 A / 65 VAC
Connector Thread (all ports)	5 / 8-24 UNEF-2B female with red plastic cap
RFI Shielding	-100 dB
Temperature	+20 °C, +60 °C and -40 °C; allow 10% change in performance at +60 °C and -40 °C
Regulatory Compliance	CE, RoHS
INSERTION LOSS	MAX (DB)
5 - 10 MHz	0.5 / 0.8
10 - 65 MHz	0.5 / 0.8
65 - 300 MHz	0.7 / 1.1
300 - 550 MHz	0.7 / 1.2
550 - 750 MHz	0.8 / 1.3
750 - 862 MHz	0.9 / 1.3
862 - 1000 MHz	1.0 / 1.3
1000 - 1200 MHz	1.2 / 1.4
ISOLATION RF-AC	MIN (DB)
5 - 10 MHz	75 / 70
10 - 65 MHz	75 / 70
65 - 860 MHz	63 / 60
860 - 1200 MHz	55 / 50
RETURN LOSS IN-OUT	MIN (DB)
10 - 47 MHz	19 / 18
47 - 950 MHz	18 / 16
950 - 1200 MHz	18 / 14