

# Entry Series



Designed to protect the multiple service customer, this simple yet revolutionary product offers a number of distinct features to improve the integrity of the drop. By combining an entire drop installation into one compact housing, the Entry Series not only cuts installation time in half it drastically reduces the number of potential failure points.

The Entry Series incorporates a completely passive Voice Modem/eMTA port for customers who offer lifeline voice service. Critical communication signals passing to and from the voice modem are never jeopardized by having to pass through active components (e.g. relays) like those found in typical bypass amplifiers.

The circuit designs maintain ANSI/SCTE recommended RF performance on the INPUT and Voice Modem/eMTA ports even when power is lost or there is IC failure. Engineered with additional nickel electrode gas tube surge protection on the INPUT port the Entry Series can withstand surges that would cause other amplifiers to fail.

## Features & Benefits

- Return loss saver
- All passive voice modem port
- Dual color LED indicator with monitoring
- UL listed bonding point
- Gas tube surge protection on INPUT port
- One power supply for all models
- Excellent corrosion resistance
- Nickel plated C360 brass F-ports
- Patented enhanced conical seizure mechanisms
- RoHS compliant

EVO1-9-U/U



EVO1-5-U/P



EVO1-5-U/U



Part Number	
EVO1-5-U/P	Standard, single output power supply
EVO1-5-U/PPI	Single output power supply & power inserter
EVO1-5-U/PPS	Dual output power supply with built-in power inserter
EVO1-5-U/U	Standard, single output power supply
EVO1-5-U/UPI	Single output power supply & power inserter
EVO1-5-U/UPS	Dual output power supply with built-in power inserter
EVO1-9-U/U	Standard, single output power supply
EVO1-9-U/UPI	Single output power supply & power inserter
EVO1-9-U/UPS	Dual output power supply with built-in power inserter



# Entry Series – Specifications



Forward path	UNIT	EVO1-5-U/P	EVO1-5-U/U	EVO1-9-U/U
Frequency Range	MHz		54-1002	
Frequency Range (Voice Modem port)	MHz		5-1002	
Input Level	dBmV		14.0 (max)	
Gain (Output ports)	dB		0.7	
Gain Variation	dB		±0.5	
Insertion Loss (Voice Modem port)	dB		3.5	
Flatness	dB		±0.5	
Return Loss (all RF ports with device powered)	dB		20	
Return Loss (Input & Voice Modem ports with no power to device)	dB		20	
Isolation (Output-to-Output)	dB	25 typical; 22 worst case		
Isolation (Power-to-RF IN)	dB		65	
Noise Figure	dB		3.5 (max)	
Group Delay Variation (ns/3.58 MHz)	ns	Ch. 2 < 20, Ch. 3 < 7, Ch. 4 and up < 5		
Composite Triple Beat*	dBc		< -73	
Composite Second Order*	dBc		< -62	
Cross Modulation*	dBc		< -75	

Return Path	UNIT	EVO1-5-U/P	EVO1-5-U/U	EVO1-9-U/U
Frequency Range	MHz		5-42	
SCTE Rated Output Power Capability	dBmV	–		55
Gain (Output Ports)	dB	–		0
Gain Variation	dB	–		±0.5
Insertion Loss (Output ports)	dB	10.5		–
Insertion Loss (Voice Modem port)	dB		3.5	
Flatness	dB		±0.5	
Return Loss (all RF ports with device powered)	dB		20	
Return Loss (Input & Voice Modem ports with no power to device)	dB		20	
Isolation (Output-to-Output)	dB	25 typical; 22 worst case		
Isolation 5-9 MHz (Voice Modem-to-Output)	dB	25		20
Isolation 9-42 MHz (Voice Modem-to-Output)	dB		25	
Noise Figure (Apparent)	dB	–	<17	<20
Group Delay Variation (1 MHz span)	ns	5 from 10-36 MHz, 20 from 5-10 MHz and 36-42 MHz		
DSO (per ANSI/SCTE 115 2006)	dBc	–		>55

General Specifications	UNIT	EVO1-5-U/P	EVO1-5-U/U	EVO1-9-U/U
Nominal Impedance	ohms		75	
Hum Modulation	dBc		-75 typical, -60 worst case	
RFI Shielding	dB		100	
Operating Temperature	°C		-40°C to +60°C	
Surge Withstand	–		<ul style="list-style-type: none"> <li>• Gas tube surge protection on INPUT port, 40 kV, 20 kA (max)</li> <li>• All RF ports: 6 kV, 3 kA loc.B IEEE C62.41-1991 Cat. B3 (combination wave) per ANSI/SCTE 81 2007</li> <li>• All RF ports: 6 kV, 200 amperes IEEE C62.41-1991 Cat. A3 (ring wave) per ANSI/SCTE 81 2007</li> </ul>	
Powering Options	–		Local and Remote	
Power Requirements	–	15 VDC, 250 mA	15 VDC, 400 mA	
Warranty	–		5 Years	

\*79 analog channels (54-552 MHz) at 14 dBmV/ch. + 75 digital channels (552-1002 MHz) at -6 dBc (total channel power), relative to analog carriers.  
All channels flat. All values are typical unless otherwise noted. Specifications are subject to change without notice.