M Entry Series



A BELDEN BRAND

Building on the solid foundation of the original Entry Series, the M Entry Series was developed to protect multiple service customers and improve overall system performance. By offering a number of distinct features including MoCA 2.0 optimized and a built-in Point of Entry (POE) filter, the M Entry Series not only protects the customers of today, but prepares them for the technologies and services of tomorrow.

MSOs today are just touching the surface of MoCA capabilities with multi-room DVR installations. With the ability to go out to 1,675 MHz, your customers will not be limited in their ability to incorporate commercially available MoCA 2.0 devices/applications for their inhome network.



Part Numbers

PPC-5M-U/U	Entry, 5-output, 1002 MHz, Downstream Unity Gain, Upstream Unity Gain
PPC-5M-U/UPI	Entry, 5-output, 1002 MHz, Downstream Unity Gain, Upstream Unity Gain, w/Power Inserter
PPC-5M-U/UPS	Entry, 5-output, 1002 MHz, Downstream Unity Gain, Upstream Unity Gain, Power Supply w/built-in Pl
PPC-9M-U/U	Entry, 9-output, 1002 MHz, Downstream Unity Gain, 0 dB Loss Upstream
PPC-9M-U/UPI	Entry, 9-output, 1002 MHz, Downstream Unity Gain, 0 dB Loss Upstream, w/ Power Inserter
PPC-9M-U/UPS	Entry, 9-output, 1002 MHz, Downstream Unity Gain, 0 dB Loss Upstream, Power Supply w/built-in Pl

Features & Benefits

- MoCA ready (1125-1675 MHz),
- Low output-to-output isolation in MoCA band
- Built-in POE filter on Input port
- All passive Voice Modem/eMTA port
- Return Loss Saver (RLS) technology
- Dual color monitoring LED
- UL Listed for bonding
- Downstream unity gain
- Upstream unity gain
- Corrosion resistant housing
- RoHS compliant



M Entry Series – *Specifications*



Forward path	UNIT	PPC-5M-U/U	PPC-9M-U/U	
Frequency Range	MHz	54–1002	54–1002	
Frequency Range (Voice Modem port)	MHz	5–1002	5–1002	
Input Level	dBmV	14.0 max	14.0 max	
Gain (Output ports)	dB	0	0	
Gain Variation	dB	+1.5/-1.0	+1.5/-1.0	
Insertion Loss (Voice Modem port)				
5 MHz	dB	4.5	4	
750 MHz	dB	5.5	5	
1002 MHz	dB	6.5	6	
Flatness	dB	± 0.9	± 0.8	
Return Loss (all RF ports with device powered)	dB	20 typical (18 min)	20 typical (18 min)	
Return Loss (Input & Voice Modem ports with no power to device)	dB	20 typical (18 min)	20 typical (18 min)	
Isolation (Output-to-Output)	dB	25 typical (22 min) ; 20 860-1002 MHz	25 typical (22 min)	
Noise Figure	dB	≤ 5	≤ 5	
Group Delay Variation (ns/3.58 MHz)	ns	Ch.2 < 20, Ch.3 < 7, Ch.4 and up < 5	Ch.2 < 30, Ch.3 < 15, Ch.4 and up < 5	
Hum Modulation	dBc	< -70	< -70	
Composite Triple Beat*	dBc	< -73	< -73	
Composite Second Order*	dBc	< -62	< -62	
Cross Modulation*	dBc	-65	-65	
CCN	dBc	-55	-55	

Return Path	UNIT	PPC-5M-U/U	PPC-9M-U/U
Frequency Range	MHz	5–42	5-42
SCTE Rated Output Power Capability	dBmV	55	55
Gain/Loss	dB	0	0
Gain Variation	dB	± 1	± 1
Insertion Loss (Voice Modem port)	dB	4.5	4
Flatness	dB	+/- 0.6 dB	+/- 0.5 dB
Return Loss (all RF ports with device powered)	dB	20 typical (18 min)	20 typical (18 min)
Return Loss (Input & Voice Modem ports with no power to device)	dB	20 typical (18 min)	20 typical (18 min)
Isolation (Output-to-Output)	dB	25 typical (20 min) 5-15 MHz; 25 typical (22 min) 15-42 MHz	25 typical (22 min)
Noise Figure (IC)	dB	≤ 5	≤ 5
Hum Modulation	dBc	-70	-70
DTO (per ANSI/SCTE 115 2006)	dBc	-60	-60
DSO (per ANSI/SCTE 115 2006)	dBc	-55	-55

*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.

M Entry Series – *Specifications*



МоСА	UNIT	PPC-5M-U/U	PPC-9M-U/U
Frequency Range	MHz	1,125–1,675	1,125–1,675
Return Loss	dB	≥ 5	≥ 5
Isolation between any Active Output or the VM port	dB	25 typical (30 max)	< 35
Downstream Rejection: between the Input port and any Active Output or the VM port	dB	40 typical (36 min)	40 typical (36 min)
Upstream Rejection: between any Active Output or the VM port and the Input port	dB	> 40	> 40

General Specifications	UNIT	PPC-5M-U/U	PPC-9M-U/U
Nominal Impedance	ohms	75	75
Isolation Power Port to Any RF Port	dB	>85	>85
RFI Shielding	dB	≥100	≥100
Operating Temperature	°C	-40 to +60	-40 to +60
F-ports and Housing	-	ANSI/SCTE Compliant; environmentally sealed to 15 psi	
Corrosion Withstand	-	Salt Spray for 1,000 hours per ANSI/SCTE 143 2013	
Surge Withstand	-	RF Ports & Power Port (with transformer): IEEE C62.41–1991, Cat. B3, Combination Wave, 6 kV, 3 kA and Cat. A3, Ring Wave, 6 kV, per ANSI/SCTE 81 2012	
Powering Options	-	Local and Remote	
Power Requirements	-	15 VDC, 450 mA	
Warranty	-	5 Years	