

Miniature Receiver Multicoupler series for the 4 m, 3 m and 2 m bands, 68 - 240 MHz

DESCRIPTION

- Active wideband receiver multicoupler for the 4 m LMR band, the FM radio band, the VHF air band, the 2 m LMR band and the DAB radio band.
- Covers 68 MHz - 240 MHz.
- Allows a number of receivers to share the same antenna without interaction and loss of signal.
- Models with 2 outputs or 4 outputs available.
- High dynamic range amplifier built in to compensate for loss in multicoupler network.
- Can simultaneously act as a low-noise preamplifier with up to min. 8 dB gain (adjustable).
- Very low amplifier noise figure ensures lowest possible S/N deterioration of received and distributed RF signals.
- Excellent amplifier large signal behaviour ensures handling of strong RF signals with very low level of IM and harmonic distortion.
- Adjustable gain.
- Power splitter with high isolation between receiver outputs.
- Low power consumption.
- Models for 12 VDC or 24 VDC nominal supply voltage available (please see ordering designations).
- DC supply on solder terminal or on 2.5mm barrel DC connector.
- RF connectors: N(f) on all ports (other types on request).
- Low weight.
- Wide temperature range.
- Sturdy aluminium box.
- Black vinyl coated to prevent corrosion.



SPECIFICATIONS

Electrical	
Model	PRO-MARHP
Gain (Input To All Outputs)	2.0 dB nominal (Gain adj. < -3 to > +8 dB)
Frequency	68 - 240 MHz
Gain variance	≤ ±2 dB
Noise Figure, Amplifier	Max. 1.5 dB, typ. 1.0 dB
Output 2. Order Intercept point (OIP2)	> +41 dBm @ max. gain
Output 3. Order Intercept point (OIP3)	> +25 dBm @ max. gain
Impedance	50 Ω
Input VSWR	Max. < 3.5:1, typ. < 2.5:1
Output VSWR	Max. < 3.5:1, typ. < 2.5:1
P1dB	> +10 dBm @ max. gain
Max. Input Power (dBm)	+17 dBm
Isolation between outputs	> 20 dB
Input-Output Isolation	> 25 dB
Power Supply	12 V models: 11 to 14 VDC 24 V models: 20 to 28 VDC Curr. Consumption 60 mA
No. of channels	2 or 4

Mechanical	
Connection(s)	N(f) (standard) TNC(f), BNC(f) or SMA(f) on request
Dimensions	129 (incl. conn.) x 152 (incl. flanges) x 35 mm / 5.08 x 5.98 x 1.38 in.
Weight	Approx. 0.36 kg / 0.79 lb.
Mounting	4 holes, ø4.3 mm

Environmental	
Operating temperature range	-30 °C to +60 °C
Ingress Protection	IP31

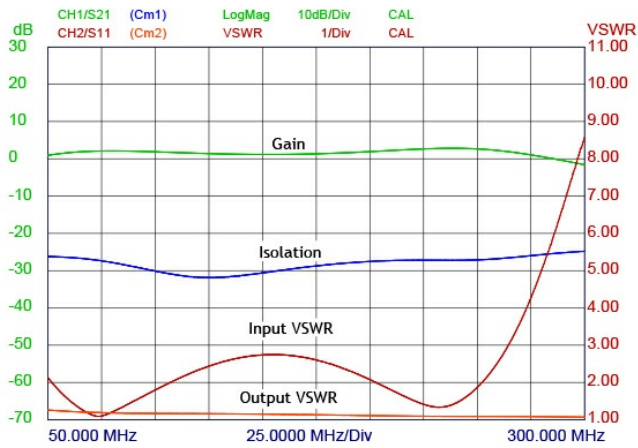
ORDERING

Model	Product No.	Description
PRO-MARHP2-4-3-2-12V-N(f)	210000182	No. of outputs: 2
PRO-MARHP2-4-3-2-24V-N(f)	210001156	No. of outputs: 2
PRO-MARHP4-4-3-2-12V-N(f)	210000173	No. of outputs: 4
PRO-MARHP4-4-3-2-24V-N(f)	210000436	No. of outputs: 4
Accessories		
Power Supply AC/DC 12V/1A EU/UK/US	240000060	

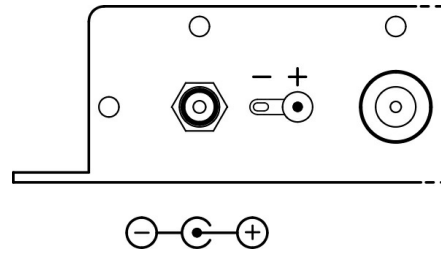
POWER SUPPLY AC/DC 12V/1A EU/UK/US



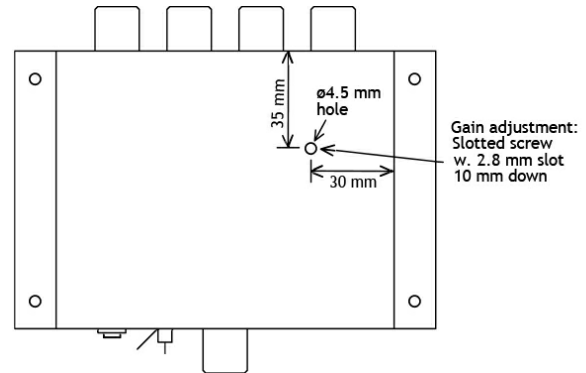
TYPICAL GAIN, ISOLATION AND VSWR CURVE



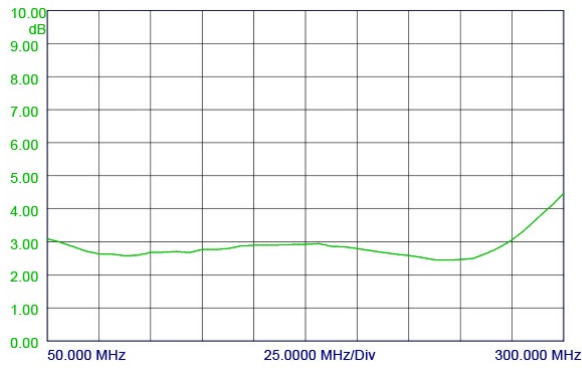
DC POWER SUPPLY CONNECTION



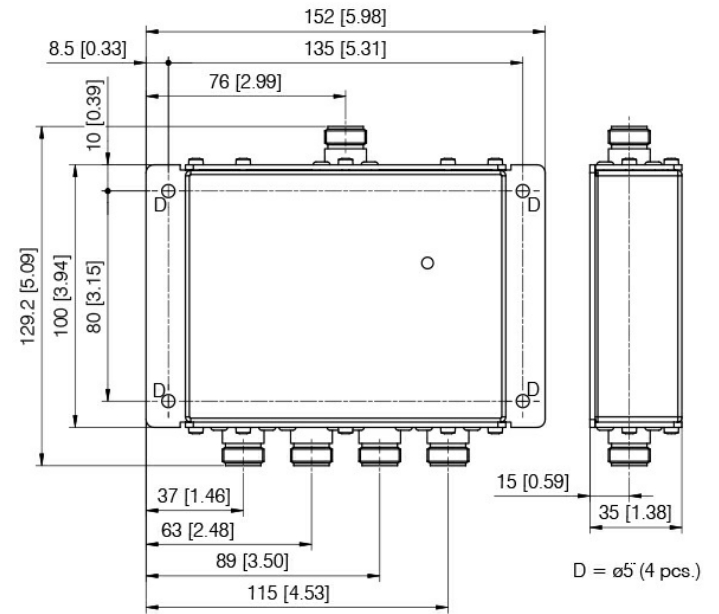
GAIN ADJUSTMENT



TYPICAL NOISE FIGURE @ NOMINAL GAIN 2 DB

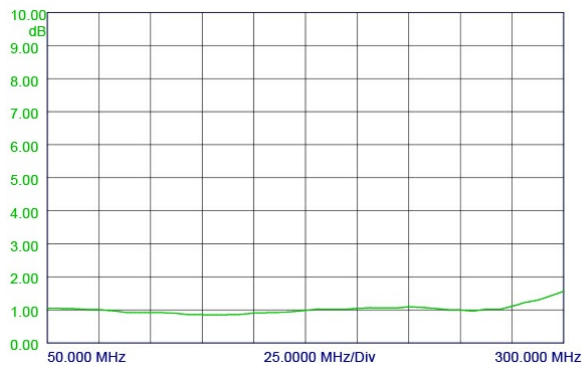


MOUNTING DETAILS



All dimensions are given in mm [in.]

TYPICAL NOISE FIGURE @ MAX. GAIN



EU AND UK DECLARATION OF CONFORMITY

Hereby Amphenol Procom declare that the product type PRO-MARHP is in compliance with EU Directive 2014/53/EU and the UK Radio Equipment Regulations 2017 (S.I. 2017 No. 1206). The full text of the Declaration of Conformity is available at:

<https://amphenolprocom.com/images/shop/catalog/pdf-for-catalogues/Declaration-of-Conformity-PRO-MARHP.pdf>

