



HPRS

Miniature Receiver Multicoupler series for the VHF and low UHF band 30 – 960 MHz



DESCRIPTION

- Active wideband receiver multicoupler for the VHF band and the low part of the UHF band with one input and two or four outputs.
- For use where a number of receivers have to share the same antenna.
- Wide frequency range. Covers 30 – 960 MHz.
- Other versions available:
 - [HPRS-S: 10 kHz – 108 MHz](#)
 - [HPRS-U: 690 MHz – 2.7 GHz](#)
- High-dynamic range amplifier built in to compensate for loss in the multicoupler network.
- High OIP2 and OIP3.
- Low amplifier noise figure.
- High isolation between receiver outputs.
- 12 V operating voltage (24 V as option).
- DC supply on solder terminal or on 2.5 mm barrel DC connector.
- Coated with black vinyl to prevent corrosion.
- Available with N, TNC or BNC connector types.

SPECIFICATION

Electrical

Power Supply	10.2 to 13.8 V / max. 450 mA
Model	HPRS
Gain (Input To All Outputs)	Gain adjustment -5 dB to +3 dB
Frequency	30 – 960 MHz
Noise Figure	< 3.5 dB @ 400 MHz
Output 3. Order Intercept point (OIP3)	> +33 dBm @ 12.0 V and max. gain
Impedance	50 Ω
P1dB	> +20 dBm @ 12.0 V and max. gain
Output 2. Order Intercept point (OIP2)	> +65 dBm @ 12.0 V and max. gain
Isolation between outputs	30 – 100 MHz > 17 dB 100 – 500 MHz > 20 dB 500 – 960 MHz > 18 dB
Output-Input Isolation	> 23 dB
Input VSWR	< 2.5:1 typ. < 2.0:1
Input-Output Isolation	> 23 dB
Output VSWR	< 2.0:1 typ. < 1.5:1
No. of channels	2 or 4

Environmental

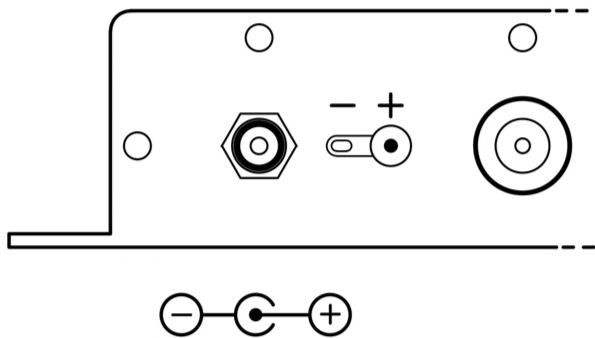
Operating temperature range	-30 °C to +50 °C
Ingress Protection	IP31
Mechanical	
Connection(s)	N(f), (BNC(f) or TNC(f)
Historic Brand	Amphenol Procom
Dimensions	Approx. 129 x 152 x 35 mm / 5.08 x 5.98 x 1.38 in. (incl. connectors and flanges)
Weight	Approx. 0.36 kg / 0.79 lb.
Mounting	5 mm / 0.20 in. dia. (four holes)

ORDERING CODES

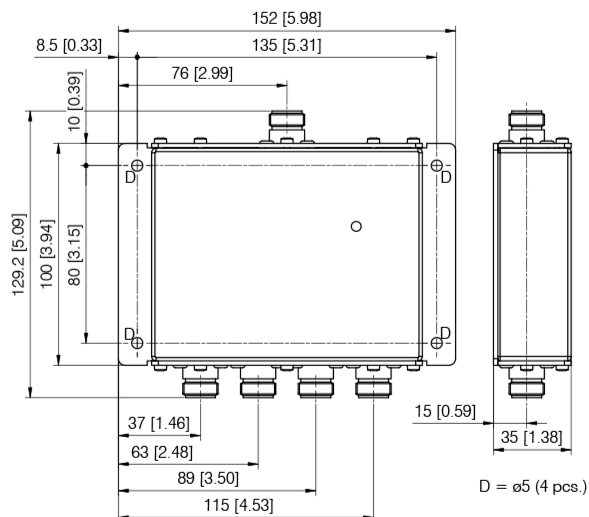
Model	Product No.	Additional Information
HPRS2-N(f)	210000201	OUTPUTS: 2
HPRS2-TNC(f)	210001958	OUTPUTS: 2
HPRS2-BNC(f)	210000319	OUTPUTS: 2
HPRS4-N(f)	210000188	OUTPUTS: 4
HPRS4-TNC(f)	210001959	OUTPUTS: 4
HPRS4-BNC(f)	210000321	OUTPUTS: 4

ADDITIONAL INFORMATION

DC Power Supply connection



Mounting Details



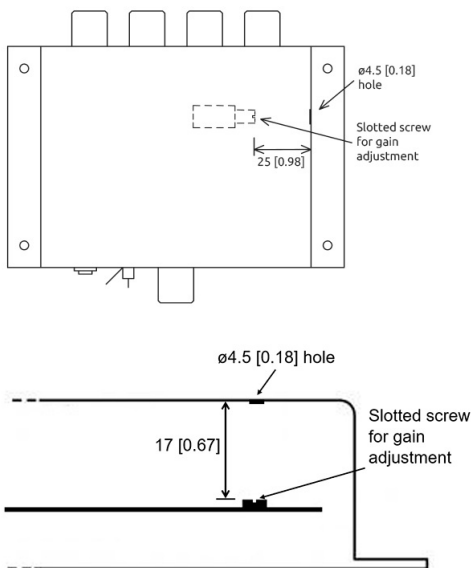
All dimensions are given in mm [in.]

Gain adjustment HPRS

The HPRS is provided with gain adjustment option.

Gain is adjusted by turning a gain adjustment screw located 17 mm behind a $\varnothing 4.5$ mm hole on the top of the HPRS housing. See drawing below. Access to the adjustment screw hole is made by removing the black label on the side of the box.

The adjustment screw is a slotted type, which can be adjusted by an ordinary 2 mm screwdriver.



All dimensions are given in mm [in.]

EU and UK Declaration of Conformity

Hereby Amphenol Procom declare that the product type HPRS 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://s3.us-west-2.amazonaws.com/catsy.1080/Declaration-of-Conformity-HPRS.pdf>

Power Supply AC/DC 12V/1A EU/UK/US



DIAGRAMS

Typical Gain and VSWR Curve

