

19 Rack-Mountable High-Performance HF Receiver Multicoupler series with 1 input and 4, 8, 12 or 16 outputs

DESCRIPTION

- Multicouplers for the LF, MF and HF band. 100 kHz - 30 MHz.
- For use where a number of receivers have to share the same antenna.
- Active wideband receiver multicouplers for the LF, MF and HF bands with 1 input and 4, 8, 12 or 16 outputs.
- Allows a number of receivers to share the same antenna without interaction and loss of signal.
- Wide frequency range: Covers 100 kHz - 30 MHz. If only a smaller frequency range is desired, a customer specified preselector can be built into prevent possible interference from strong transmitters outside the frequency band of interest. Procom A/S offer a number of band specific filters intended for preselector use. Please refer to the preselector overview and specify frequency range when ordering.
- Ultra-high dynamic range amplifier built in to compensate for loss in multicoupler network.
- The excellent large signal behaviour of the amplifier ensures handling of strong RF signals with very low levels of IM and harmonic distortion.
- Low amplifier noise figure ensures negligible S/N deterioration of the received and distributed RF signals.
- High isolation between receiver outputs.
- Built-in signal limiter to protect amplifier input from signals larger than 10 V pp
- Built-in DC grounded 100 kHz HP filter to protect amplifier input from strong V LF noise e.g. during thunderstorms.
- Static discharge protected by Gas Discharge Tube across the input.
- Operates on 230 V AC or 115 V AC mains supply or 12 V or 24 V DC supply (depending on type, see ordering designations).
- Galvanically isolated power supply with power backup function.
- Automatic switching to DC supply if the mains supply fails.
- "POWER ON" lamp on front.
- Mains supply connector: IEC type fitted with noise filter.
- DC supply connector: Terminal block fitted with noise filter.
- RF connectors: N-female on all ports (other types on request).
- 19" rack module housing.
- Only 1 HU (PRO-ARHP4GS and PRO-ARHP8GS) or 2 HU (PRO-ARHP12GS and PRO-ARHP16GS) (1 height unit = 44.45 mm).
- Available with black anodized front plate.

Please Note:

Power cable is not included, must be ordered separately, see Accessories.



SPECIFICATIONS

Electrical	
Model	PRO-ARHP...GS-...
Gain (Input To All Outputs)	1 dB
Frequency	100 kHz - 30 MHz
Gain variance	< 2.0 dB
Max. Output Power @ 1 dB Compression (P1dB)	≥ 14 dBm @ 1 MHz
Noise Figure, Amplifier	≤ 5.5 dB @ 10 MHz
Noise Figure, Outputs	≤ 7 dB @ 10 MHz
Output 2. Order Intercept point (OIP2)	≥ 37 dBm @ 1 MHz
Output 3. Order Intercept point (OIP3)	≥ 29 dBm @ 1 MHz
Impedance	50 Ω
Input VSWR	< 2.5:1 typ. < 1.5:1
Output VSWR	Max. 1.5:1 typ. < 1.3:1
Isolation between outputs	> 20 dB
Input-Output Isolation	> 35 dB
Power Supply	198 to 264 V AC, max. 160 mA
DC Supply	10.8 to 14.4 V DC, max. 2A
No. of channels	4, 8, 12 or 16

Mechanical	
Power Connector	3-terminal IEC60320-1 C14 (male)
Connection(s)	N(f) (standard) BNC(f), TNC(f) or SMA(f) on request
DC Connector	3-pole screw terminal block
Dimensions	PRO-ARHP4GS-N and PRO-ARHP8GS : 19" x 1HU x 261 mm (482.6 x 43.65 x 261 mm) / 19 x 1.72 x 10.28 in. PRO-ARHP12GS-N and PRO-ARHP16GS : 19" x 2HU x 261 mm (482.6 x 88.1 x 261 mm) / 19 x 3.47 x 10.28 in.
Weight	PRO-ARHP4GS-N and PRO-ARHP8GS-N : Approx. 2.8 kg / 6.17 lb. PRO-ARHP12GS-N and PRO-ARHP16GS-N : Approx. 4.8 kg / 9.70 lb.
Environmental	
Operating temperature range	-10 °C to +50 °C
Humidity	Max. 85% @ 30 °C

ORDERING DESIGNATIONS

CONTACT FOR SYSTEM-SPECIFIC PRODUCT NO.

Use the guide below to make the name of the PRO-ARHP you would like to buy. Remember to buy the Power cable separately if needed.

Model	Front plate	No. of outputs	AC Power	DC Power	Antenna Connector	Rx Connector	Number of loads	Preselector filter
PRO-ARHP	Blank = blank ** Black lacquered = B	4 outputs = 4GS 8 outputs = 8GS 12 outputs = 12GS 16 outputs = 16GS	230 V AC = 230 V 115 V AC = 115 V	12 V DC = 12 V 24 V DC = 24 V	N-female = N TNC-female = TNC BNC-female = BNC	N-female = N TNC-female = TNC BNC-female = BNC	No load = blank * One 1W load = 1L Two 1W loads = 2L Three 1W loads = 3L	No filter = blank See tables with preselectors below

Naming Example

PRO-ARHP	B	8GS	-230 V	/12 V	-N	/N	-1L	BPF 1.6-30 C
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Naming Example: PRO-ARHPB8GS-230V/12V-N/N-1L BPF 1.6-30 C

* Terminating unused ports will secure the electrical performances of the RMC.
** "Blank" means sign omitted.

ACCESSORIES

Model	Product No.
Power Cable EU , with Ground	210002646
Power Cable UK , with Ground	210002647
Power Cable US , with Ground	210002648

STANDARD LOW-LOSS PRESELECTOR FILTERS FOR PRO-ARHP...GS

TYPE DESIGNATION	FILTER TYPE	PASS BAND
BPF 1.6-30	Band pass	1.6 - 30 MHz
HP2	High pass	2.0 - 40 MHz

MODEL HOUSING

PRO-ARHP4GS-N AND PRO-ARHP8GS-N



MODEL HOUSING - BACK SIDE

PRO-ARHP8GS-N



PRO-ARHP12GS-N AND PRO-ARHP16GS-N



EU AND UK DECLARATION OF CONFORMITY

Hereby Amphenol Procom declare that the product type PRO-ARHP...GS-... 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-ARHPxGS.pdf>

