

19" Rack-Mountable Receiver Multicoupler series for the VHF through low UHF bands 30 MHz - 960 MHz

DESCRIPTION

- Multicouplers with 1 input and 4, 8, 12 or 16 outputs.
- For use where a number of receivers have to share the same antenna.
- Active wideband receiver multicoupler for the VHF and low UHF 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 30 MHz – 960 MHz.
- If only a smaller frequency range is desired, a preselector filter can be built in to prevent possible interference from strong transmitters outside the frequency band of interest. Amphenol Procom offer a wide range of both band selective and narrow-band low-loss filters suitable for preselector use.
- Please refer to the preselector overview and specify frequency range when ordering.
- Other rack-mounted multicoupler series available:
 - PRO-ARS: 10 kHz – 108 MHz
 - PRO-ARU: 690 MHz – 2700 MHz
- Ultra-high dynamic range amplifier built in to compensate for loss in multicoupler network.
- Push-pull high-current amplifier design ensures outstanding multicoupler linearity and high reject of especially even-order distortion products.
- Handles even very strong RF signals with negligible levels of IM and harmonic distortion.
- Low amplifier noise figure ensures lowest possible S/N deterioration of the received and distributed RF signals.
- High isolation between receiver outputs.
- Operates on 230 VAC or 115 VAC 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-AR4G-... and PRO-AR8G-...) or 2 HU (PRO-AR12G-... and PRO-AR16G-...) (1 height unit = 44.45 mm).
- Available with black powder lacquered front plate.
- Front plate black structure powder painted.



SPECIFICATIONS

Electrical		
Model	PRO-AR4G-N	PRO-AR8G-N PRO-AR12G-N PRO-AR16G-N
Gain (Input To All Outputs)	2 dB	
Frequency	30 - 960 MHz	
Effective Noise Figure All Outputs	< 5.5 dB	< 8.0 dB
Gain Variance	< ±2.0 dB	
Maximum Ouput Power @P1dB	> +20 dBm	> +17 dBm
Noise Figure, Amplifier	< 4.0 dB	< 6.0 dB
OIP2	> +60 dBm	> +50 dBm
OIP3	> +33 dBm	> +25 dBm
Impedance	50 Ω	
Input VSWR	Max. 2.5:1 With Preselector: Max. 2.0:1, typ. <1.5:1	
Output VSWR	< 1.5:1	
Max. Input Power (dBm)	18 dBm	
Isolation Between Outputs	30 - 50 MHz: > 18 dB 50 - 800 MHz: > 20 dB 800 - 960 MHz: > 18 dB	
Input-Output Isolation	> 23 dB	> 46 dB
Power Supply	230 V models: 198 to 264 VAC 47 - 63 Hz/ Max. 0.16 A 115 V models: 100 to 127 VAC 47 - 63 Hz/ Max. 0.32 A	
Current Consumption	0.6 to 0.7 A	PRO-AR8G-... : 1.0 to 1.3 A PRO-AR12G-... : 1.4 to 1.7 A PRO-AR16G-... : 1.8 to 2.1 A
DC Supply, 12 V Types	10.8 to 14.4 VDC	
DC Supply, 24 V Types	20 to 28 VDC	
Mechanical		
Power Connector	3-terminal IEC60320-1 C14 (male)	
Connection(s)	N female (standard), BNC, TNC or SMA on request	
DC Connector	3-pole screw terminal block	
Dimensions	PRO-AR4G-..., PRO-AR8G-...: 19" x 1HU x 261 mm (483 x 44.45 x 261 mm) / (19.02 x 1.75 x 10.28 in.) PRO-AR12G-..., PRO-AR16G-...: 19" x 2HU x 261 mm (483 x 89.9 x 261 mm) / (19.02 x 3.54 x 10.28 in.)	
Altitude	0 to 2000 m	
Weight	PRO-AR4G-..., PRO-AR8G-...: Approx. 2.8 kg. / 6.17 lb. PRO-AR12G-..., PRO-AR16G-...: Approx. 4.4 kg. / 9.70 lb.	
Environmental		
Operating Temperature Range	-10°C to +50°C	
Humidity	< 90% non-condensing	

ORDERING

Type	Product No.	Description
PRO-AR16G-N	210000111	OUTPUTS: 16 230 VAC Supply
PRO-AR4G-N	210000127	OUTPUTS: 4 230 VAC Supply
PRO-AR8G-N	210000129	OUTPUTS: 8 230 VAC Supply
PRO-AR8G-N-24V	210000152	OUTPUTS: 8 230 VAC Supply
PRO-AR4G-N-24V	210000165	OUTPUTS: 4 230 VAC Supply
PRO-AR12G-N	210000482	OUTPUTS: 12 230 VAC Supply
PRO-AR16G-N-24V	210001183	OUTPUTS: 16 230 VAC Supply
PRO-AR12G-N-24V	210001638	OUTPUTS: 12 230 VAC Supply
PRO-AR4G-N-115V/12V	210001711	OUTPUTS: 4 115 VAC Supply
PRO-AR4G-N-115V/24V	210002596	OUTPUTS: 4 115 VAC Supply
PRO-AR8G-N-115V/12V	210000250	OUTPUTS: 8 115 VAC Supply
PRO-AR8G-N-115V/24V	210001089	OUTPUTS: 8 115 VAC Supply
PRO-AR12G-N-115V/12V	210002597	OUTPUTS: 12 115 VAC Supply
PRO-AR12G-N-115V/24V	210002598	OUTPUTS: 12 115 VAC Supply
PRO-AR16G-N-115V/12V	210002599	OUTPUTS: 16 115 VAC Supply
PRO-AR16G-N-115V/24V	210002600	OUTPUTS: 16 115 VAC Supply

MODEL HOUSING

PRO-AR4G-N AND PRO-AR8G-N



PRO-AR12G-N AND PRO-AR16G-N



MODEL HOUSING - BACK SIDE

PRO-AR8G-N



LOW-LOSS PRESELECTOR FILTERS FOR PRO-AR...G, OVERVIEW

Band selective standard blackbox filters (other filters on request)

TYPE DESIGNATION	FILTER TYPE	PASS BAND FREQUENCY RANGE
BPF 66-88	Band pass	66 - 88 MHz
BPF 88-108	Band pass	88 - 108 MHz
BPF 112-136	Band pass	112 - 136 MHz
BPF 118-137	Band pass	118 - 137 MHz
BPF 118-174	Band pass	118 - 174 MHz
BPF 136-225	Band pass	136 - 225 MHz
BPF 146-174	Band pass	146 - 174 MHz
BPF 225-400	Band pass	225 - 400 MHz
BPF 300-500	Band pass	300 - 500 MHz
BPF 800-1000	Band pass	800 - 1000 MHz
LP 174-FME	Low pass	0 - 174 MHz
HP 380-FME	High pass	380 - 1000 MHz

Narrow band standard BP filters:

TYPE DESIGNATION	FILTER TYPE	CENTER FREQUENCY	-1 dB BANDWIDTH
BPF 4/4-[BW]	Band pass	To be ordered within 66 - 88 MHz	To be specified as 2, 4 or 6 MHz
BPF 3/4	Band pass	To be ordered within 112 - 136 MHz	1.5 MHz
BPF 2/4-[BW]	Band pass	To be ordered within 144 - 175 MHz	To be specified as 2, 4 or 6 MHz
BPF 70/4-HX	Band pass	To be ordered within 380 - 470 MHz	To be ordered within 3-15 MHz
BPF 900/4	Band pass	To be ordered within 820 - 960 MHz	Typ. 7 MHz

HOW TO ORDER CUSTOMIZED TYPES

PRO-AR	8G	-N(f)	-BPF	-115V/24 V
↓	↓	↓	↓	↓
Series	No. of outputs	Connector type	Preselector filter**	Supply voltage
PRO-AR	4 outputs = 4G 8 outputs = 8G 12 outputs = 12G 16 outputs = 16G	N-female = -N(f) TNC-female = -TNC(f) BNC-female = -BNC(f)	No filter = blank* Band pass = -BPF High pass = -HPF Low pass = -LPF	230VAC/12 VDC = blank* 230VAC/24 VDC = -24 V 115VAC/12VDC = -115 V/12 V 115VAC/24VDC = -115 V/24 V

* "blank" means sign omitted.
** Preselector pass band [MHz] to be stated after the ordering designation.

EU DECLARATION OF CONFORMITY

Hereby Amphenol Procom declare that the product type PRO-AR...G is in compliance with EU Directive 2014/53/EU.
The full text of the EU Declaration of Conformity is available at:

/images/shop/catalog/pdf-for-catalouges/Declaration-of-Conformity-PRO-ARxG.pdf