

Features

- Antenna multi-combiner technology to reduce the number of antennas required to operate multiple transceivers.
- Solution for limited platform space or where a reduced visual signature is required.
- VHF, UFO/MUOS SATCOM, UHF, L-S Band.
- Antenna Ports: 1 x 30-88 MHz / 1 x 243-380 MHz / 2 x 118-2700 MHz.
- Radio Ports: 2 x 30-88 MHz, 3 x 118-480 MHz, 2 x 243-380 MHz, 2 x 700-2700 MHz.
- Simultaneous transmission on all ports.
- High isolation between ports.
- Designed to fit standard 19 inch rack. 1U tall, half-rack width.
- Highly configurable to meet specific customer platform and frequency requirements.

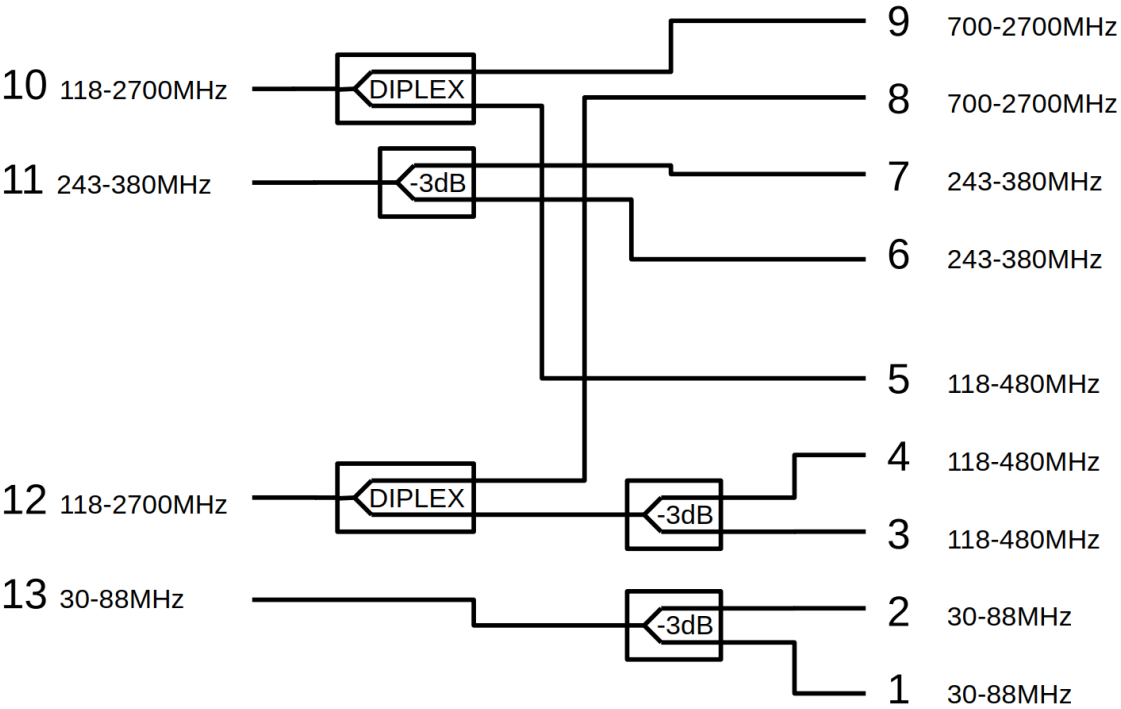


Electrical specification

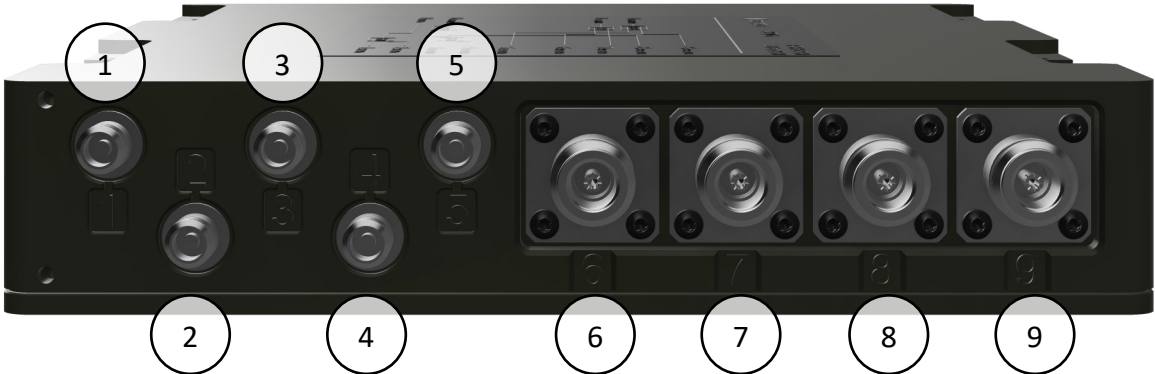
Frequency range	30-88 MHz 243-380 MHz 118-480 MHz 700-2700 MHz		
VSWR	30-88 MHz 243-380 MHz 118-480 MHz 700-2700 MHz	< 1.5:1 < 1.5:1 < 2:1 < 2:1	
Nominal impedance	50 Ohm		
Power rating (simultaneous transmission on all ports)	30-88 MHz 243-380 MHz 118-480 MHz 700-2700 MHz	50 W, 30 mins 50 W, 30 mins 50 W, 30 mins 40 W, 20 mins	
Splitter / Diplexer Loss	30-88 MHz	Port 13 to Port 1	≤ -3.1 dB
	Two way split:	Port 13 to Port 2	≤ -3.2 dB
	243-380 MHz, Two-way split:	Port 11 to Port 6 Port 11 to Port 7	≤ -3.6 dB ≤ -3.2 dB
	118-2700 MHz, Three-way split:	Port 12 to Port 8 Port 12 to Port 3 Port 12 to Port 4	700-2700 MHz ≤ -0.8 dB 118-480 MHz ≤ -4 dB 118-480 MHz ≤ -4 dB
	118-2700 MHz, Two-way split	Port 10 to Port 5 Port 10 to Port 9	118-480 MHz ≤ -1 dB 700-2700 MHz ≤ -1 dB
Isolation	30-88 MHz	Port 1 to Port 2	< -25 dB, typically -30 dB *
	118-480 MHz	Port 3 to Port 4	< -15 dB, typically -20 dB *
	118-480 MHz	Port 3 to Port 8	< -30 dB, typically -70 dB
	700-2700 MHz	Port 3 to Port 8	< -25 dB, typically -45 dB
	118-480 MHz	Port 4 to Port 8	< -30 dB, typically -70 dB
	700-2700 MHz	Port 4 to Port 8	< -25 dB, typically -45 dB
	118-480 MHz	Port 5 to Port 9	< -25 dB, typically -70 dB
	700-2700 MHz	Port 5 to Port 9	< -25 dB, typically -40 dB
	243-380 MHz	Port 6 to Port 7	< -15 dB, typically -25 dB *
Connectors	Tx/Rx:	Port 1 - 30-88 MHz, TNC Female Port 2 - 30-88 MHz, TNC Female Port 3 - 118-480 MHz, TNC Female Port 4 - 118-480 MHz, TNC Female Port 5 - 118-480 MHz, TNC Female Port 6 - 243-380 MHz, N Type Female Port 7 - 243-380 MHz, N Type Female Port 8 - 700-2700 MHz, N Type Female Port 9 - 700-2700 MHz, N Type Female	
	Antenna:	Port 10 - 118-2700 MHz, N Type Female Port 11 - 243-380 MHz, N Type Female Port 12 - 118-2700 MHz, N Type Female Port 13 - 30-88 MHz, N Type Female	

* Actual isolation value dependant on the antenna VSWR. Values shown based on 50 ohm termination.

Antenna

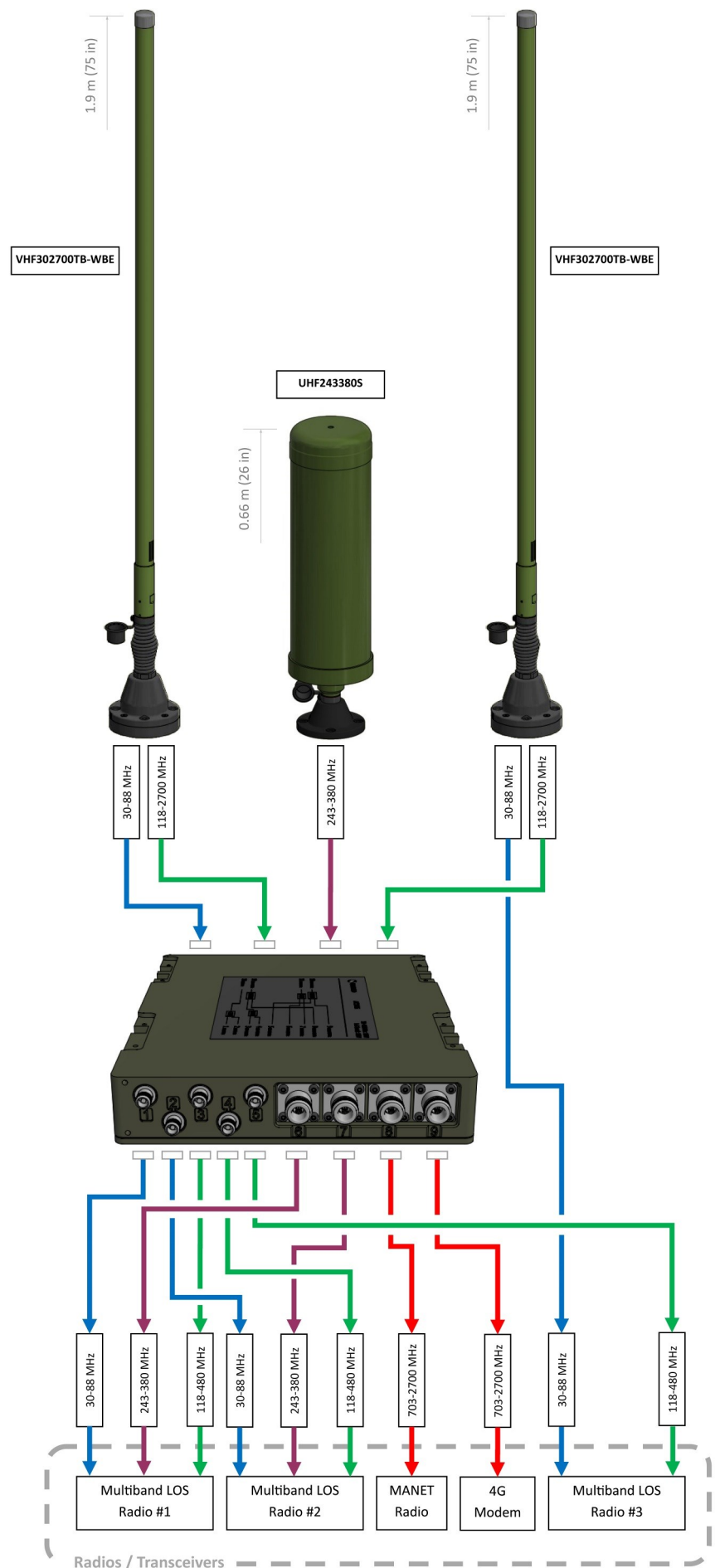


Tx/Rx



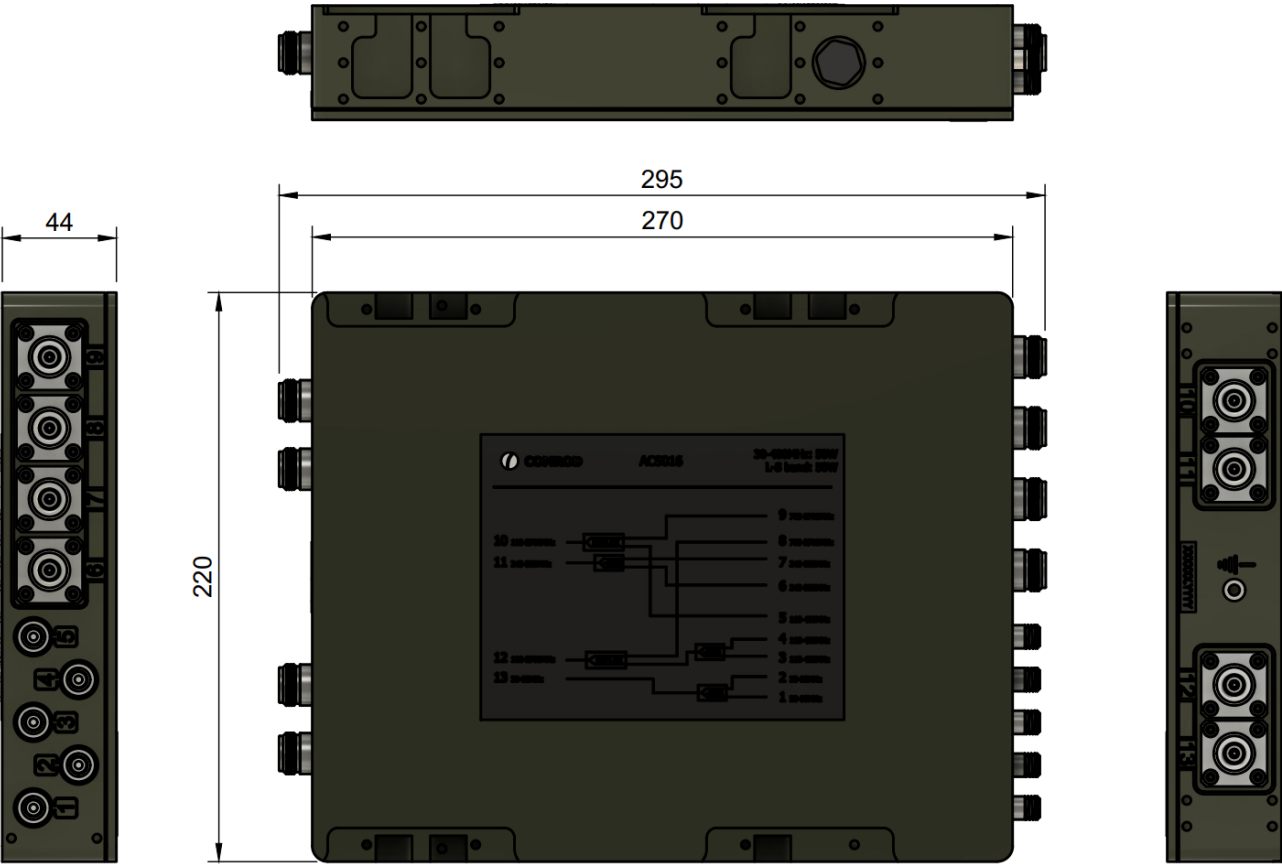
Typical System Configuration

- 1 x ACS016
- 2 x VHF302700TB-WBE Antennas
30-88 MHz / 118-2700 MHz
- 1 x UHF243380S MUOS Antenna
243-380 MHz
- 4 Antenna Ports / 11 Transceiver Ports



Mechanical specification

Design	Aluminum housing, 1U tall, half-rack (19 in) width
Dimensions - housing	W 220 x D 270 x T 44 mm (8.7 x 10.6 x 1.7 in)
Dimensions - overall	W 220 x D 295 x T 44 mm (8.7 x 11.6 x 1.7 in)
Weight	3.1 kg (6.8 lb)
Temperature range	-55°C to +71°C, -67°F to +160°F
Environmental	IP67

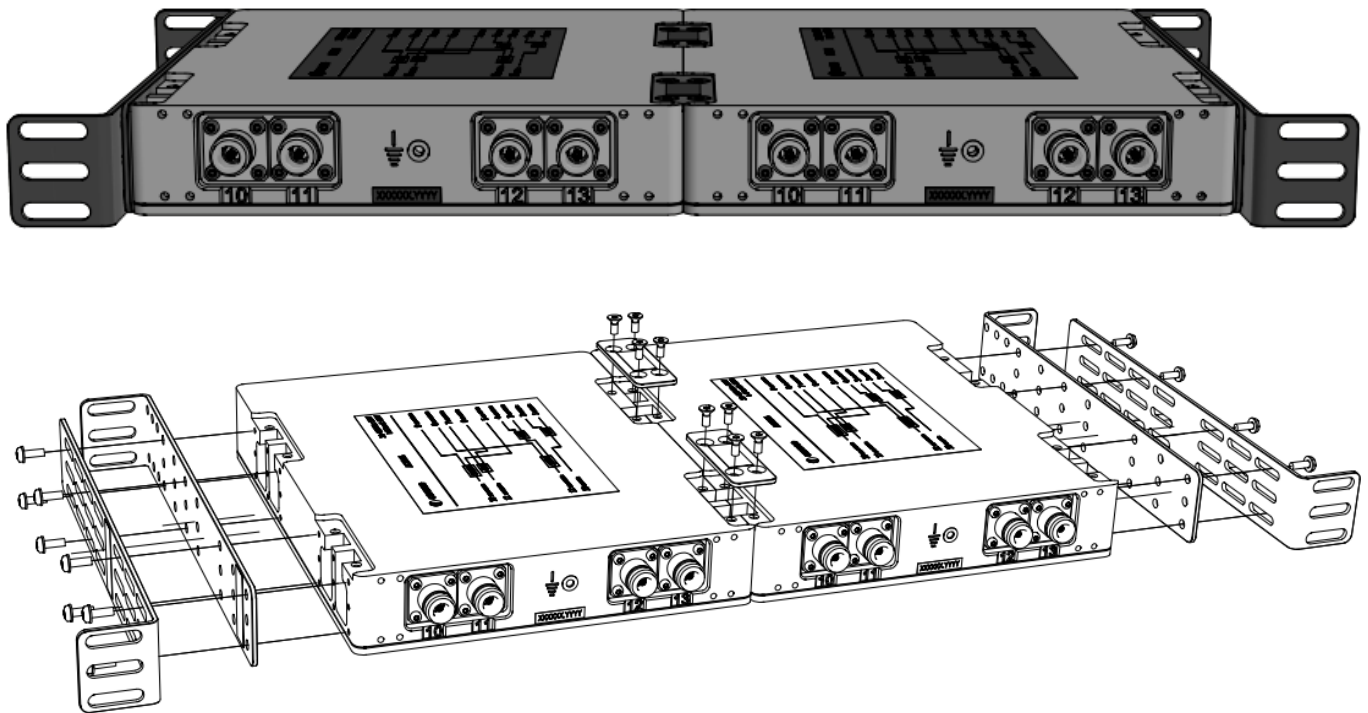


Mounting Accessories

Comrod has a large range of bracket accessories for mounting ACS series products. The standard ACS enclosure is 1U tall x half 19" rack width (44mm tall x 220mm wide x 270mm deep). Two ACS combiners can be joined side-by-side to fit into a 19" rack as shown below. Extension brackets are also available for mounting a single ACS combiner into a 19" rack.

19" Rack Mounting

2 x ACS combiners with joining brackets and 19" rack mounting brackets



Bulkhead Mounting

Single ACS combiner with bulkhead mounting brackets

