

Features

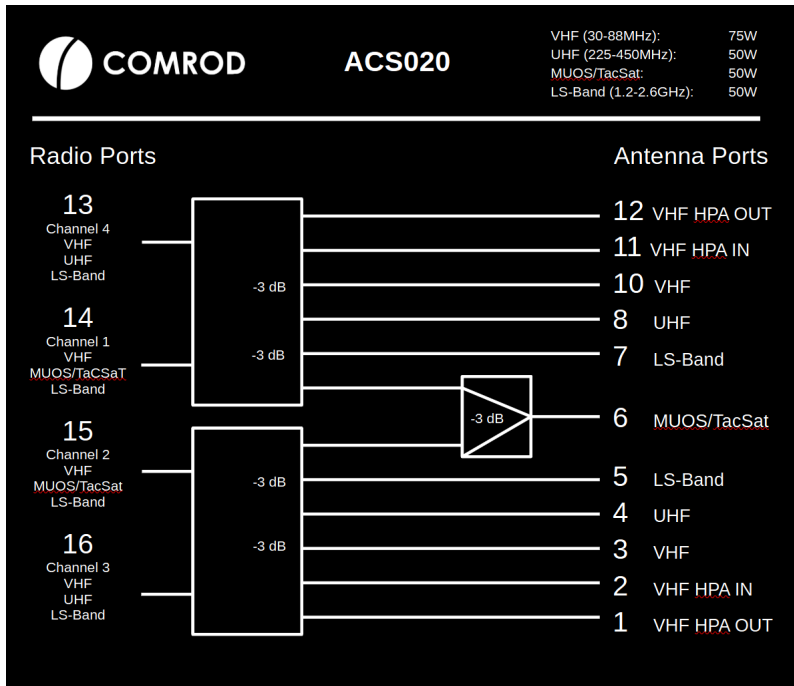
- Antenna multi-combiner to reduce the number of antennas required to operate multiple transceivers.
- Solution for limited platform space or where a reduced visual signature is required.
- VHF, UHF, L-S Band & MUOS/TacSat.
- Antenna Ports: 2 x VHF HPA, 2 x VHF, 2 x UHF, 2 x LS-Band, 1 x MUOS/TacSat
- Radio Ports: 4 x 30-2600 MHz.
- Simultaneous transmission on all ports.
- High isolation between ports.
- Designed to fit standard 19 inch rack. 1U tall, half-rack width.



Electrical specification

Frequency range	30-88 MHz 225-450 MHz 243-380 MHz 1200-2600 MHz																																																						
VSWR	30-88 MHz < 1.2:1 225-450 MHz < 1.2:1 243-380 MHz < 1.2:1 1200-2600 MHz < 1.4:1																																																						
Nominal impedance	50 Ohm																																																						
Power rating (simultaneous transmission on all ports)	30-88 MHz 75 W, 30 mins 225-450 MHz 50 W, 30 mins 243-380 MHz 50 W, 30 mins 1200-2600 MHz 50 W, 30 mins																																																						
Insertion Loss (Including combiner losses)	<table border="0"> <tr> <td rowspan="4">30-88 MHz</td> <td>Port 13 to Port 10</td> <td>≤ -3.5 dB</td> <td>typ ≤ -3.3 dB</td> <td rowspan="4">(Jumper @ port 11-12)</td> </tr> <tr> <td>Port 14 to Port 10</td> <td>≤ -3.5 dB</td> <td>typ ≤ -3.3 dB</td> </tr> <tr> <td>Port 15 to Port 3</td> <td>≤ -3.5 dB</td> <td>typ ≤ -3.3 dB</td> </tr> <tr> <td>Port 16 to Port 3</td> <td>≤ -3.5 dB</td> <td>typ ≤ -3.3 dB</td> <td>(Jumper @ port 1-2)</td> </tr> <tr> <td rowspan="2">225-450 MHz</td> <td>Port 13 to Port 8</td> <td>≤ -0.5 dB</td> <td>typ ≤ -0.3 dB</td> <td></td> </tr> <tr> <td>Port 16 to Port 4</td> <td>≤ -0.5 dB</td> <td>typ ≤ -0.3 dB</td> <td></td> </tr> <tr> <td rowspan="2">243-380 MHz</td> <td>Port 14 to Port 6</td> <td>≤ -3.9 dB</td> <td>typ ≤ -3.6 dB</td> <td></td> </tr> <tr> <td>Port 15 to Port 6</td> <td>≤ -3.6 dB</td> <td>typ ≤ -3.4 dB</td> <td></td> </tr> <tr> <td rowspan="4">1200-2600 MHz</td> <td>Port 13 to Port 7</td> <td>≤ -5.0 dB</td> <td>typ ≤ -4.2 dB</td> <td></td> </tr> <tr> <td>Port 14 to Port 7</td> <td>≤ -4.7 dB</td> <td>typ ≤ -4.2 dB</td> <td></td> </tr> <tr> <td>Port 15 to Port 5</td> <td>≤ -4.6 dB</td> <td>typ ≤ -4.2 dB</td> <td></td> </tr> <tr> <td>Port 16 to Port 5</td> <td>≤ -4.7 dB</td> <td>typ ≤ -4.2 dB</td> <td></td> </tr> </table>					30-88 MHz	Port 13 to Port 10	≤ -3.5 dB	typ ≤ -3.3 dB	(Jumper @ port 11-12)	Port 14 to Port 10	≤ -3.5 dB	typ ≤ -3.3 dB	Port 15 to Port 3	≤ -3.5 dB	typ ≤ -3.3 dB	Port 16 to Port 3	≤ -3.5 dB	typ ≤ -3.3 dB	(Jumper @ port 1-2)	225-450 MHz	Port 13 to Port 8	≤ -0.5 dB	typ ≤ -0.3 dB		Port 16 to Port 4	≤ -0.5 dB	typ ≤ -0.3 dB		243-380 MHz	Port 14 to Port 6	≤ -3.9 dB	typ ≤ -3.6 dB		Port 15 to Port 6	≤ -3.6 dB	typ ≤ -3.4 dB		1200-2600 MHz	Port 13 to Port 7	≤ -5.0 dB	typ ≤ -4.2 dB		Port 14 to Port 7	≤ -4.7 dB	typ ≤ -4.2 dB		Port 15 to Port 5	≤ -4.6 dB	typ ≤ -4.2 dB		Port 16 to Port 5	≤ -4.7 dB	typ ≤ -4.2 dB	
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Radio Connections

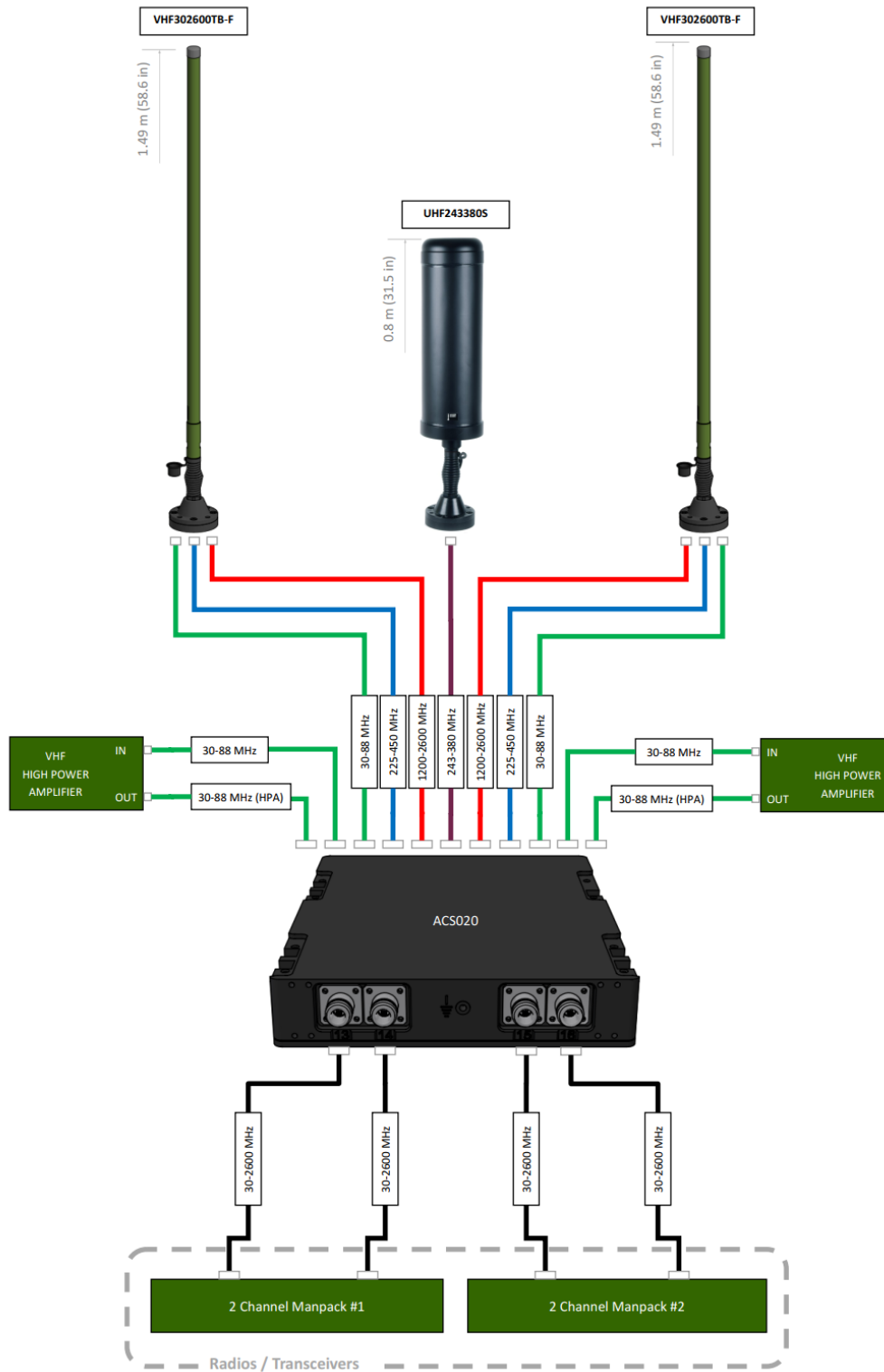


Antenna Connections



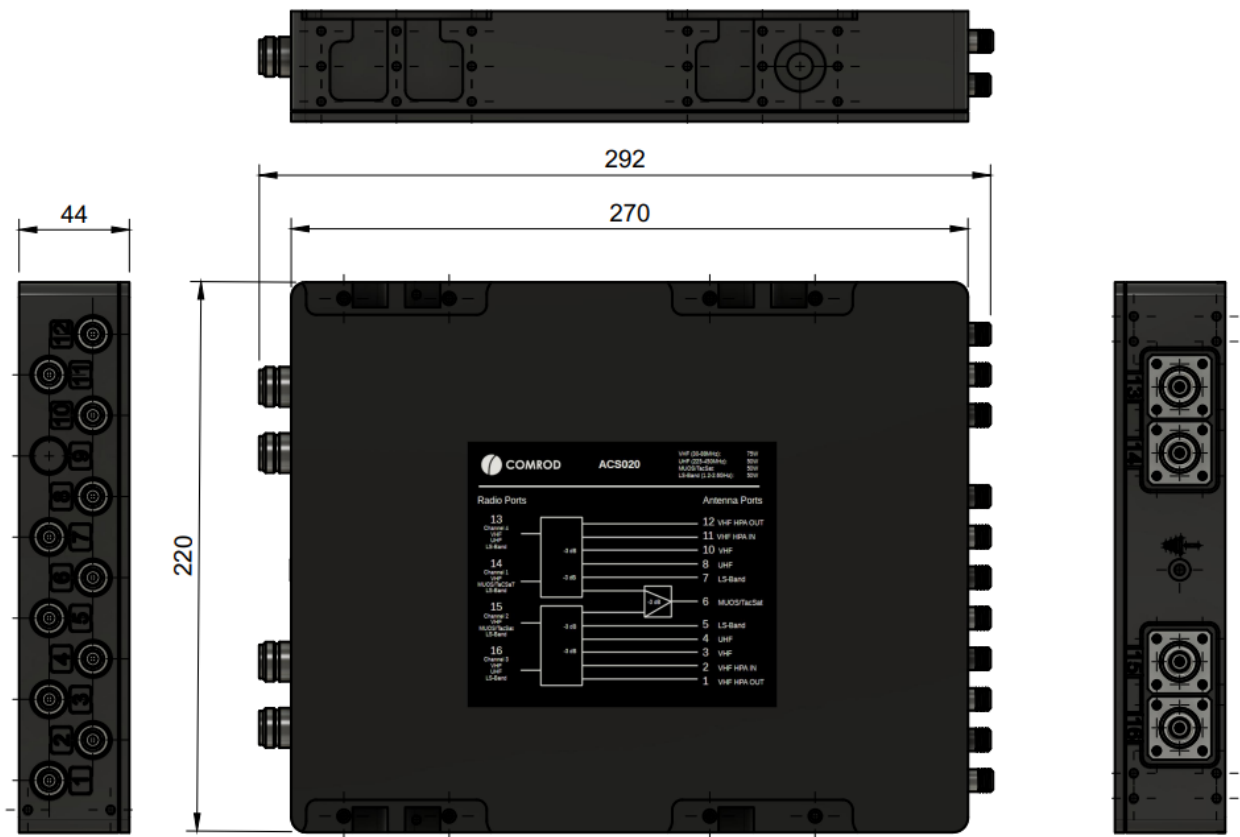
Typical System Configuration

- 1 x ACS020
- 2 x VHF302600TB-F Antennas (30-2600 MHz)
- 1 x UHF243380S MUOS/TacSat Antenna (243-380 MHz)
- 4 Radio Ports (30-2600 MHz)
- 2 x VHF (HPA), 2 x VHF, 2 x UHF, 2 x LS-Band, 2 x MUOS/TacSat



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 292 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

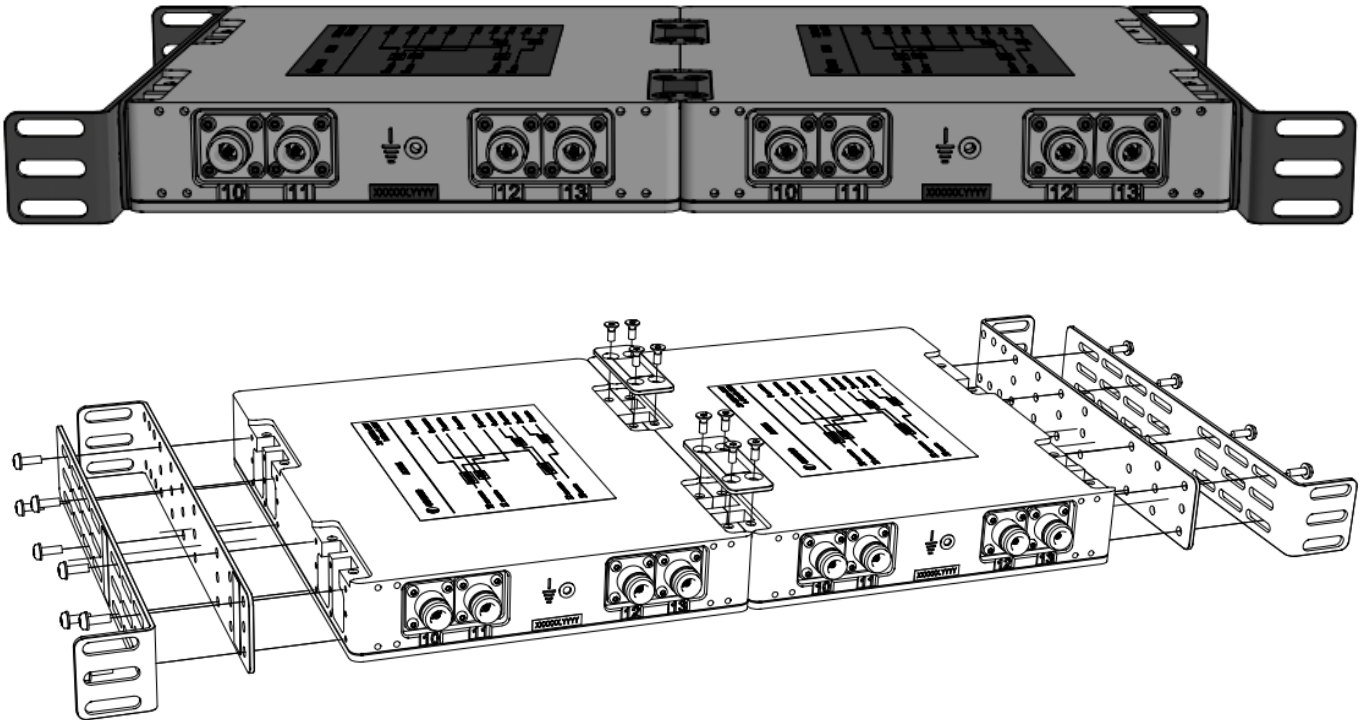


Mounting Accessories

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

