

## ACS016

Antenna Multi-Combiner, VHF/UHF/MUOS/UHF SatCom/L-S Band  
30-88 MHz, 118-480 MHz, 243-380 MHz, 700-2700 MHz

Control Systems, Couplers and Diplexers



### Features

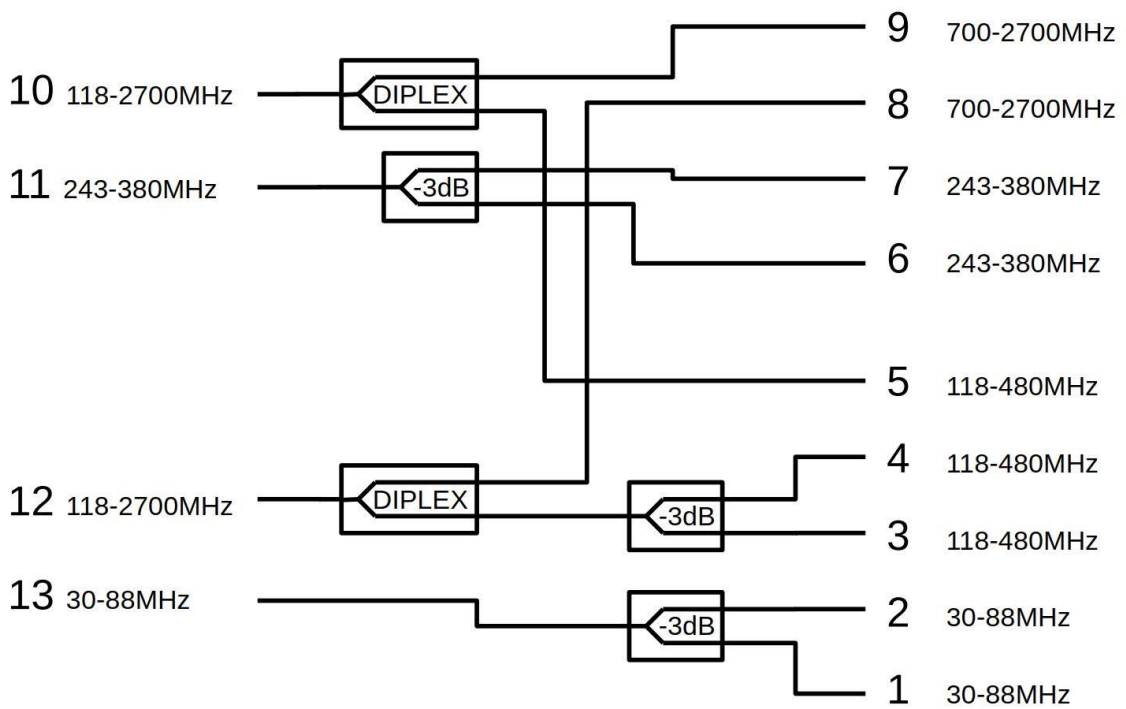
- Antenna multi-combiner technology to reduce the number of antennas required to operate multiple transceivers.
- Solution for limited platform space or where a reduced visual signature is required.
- VHF, UFO/MUOS SATCOM, UHF, L-S Band.
- Antenna Ports: 1 x 30-88 MHz / 1 x 243-380 MHz / 2 x 118-2700 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 Specifications

<b>Frequency Range</b>	30-88 MHz 243-380 MHz 118-480 MHz 700-2700 MHz		
<b>VSWR</b>	30-88 MHz	< 1.5:1	
	243-380 MHz	< 1.5:1	
	118-480 MHz	< 2:1	
	700-2700 MHz	< 2:1	
<b>Nominal Impedance</b>	50 ohm		
<b>Power Rating (simultaneous transmission on all ports)</b>	30-88 MHz	50 W, 30 mins	
	243-380 MHz	50 W, 30 mins	
	118-480 MHz	50 W, 30 mins	
	700-2700 MHz	40 W, 20 mins	
<b>Splitter / Diplexer Loss</b>	30-88 MHz Two way split:	Port 13 to Port 1 Port 13 to Port 2	≤ -3.1 dB ≤ -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
<b>Isolation</b>	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 *
<b>Connectors</b>	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	

## Antenna

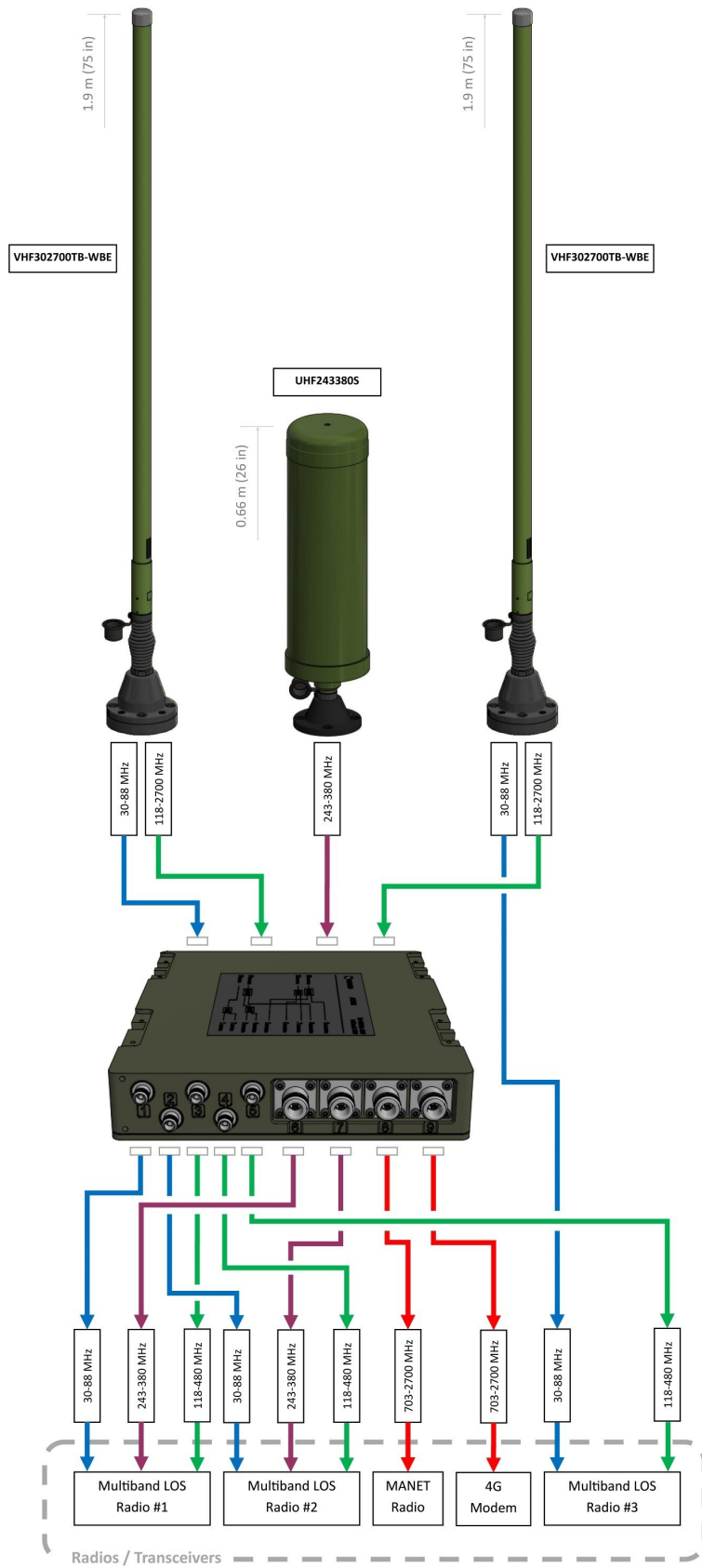


## Tx/Rx



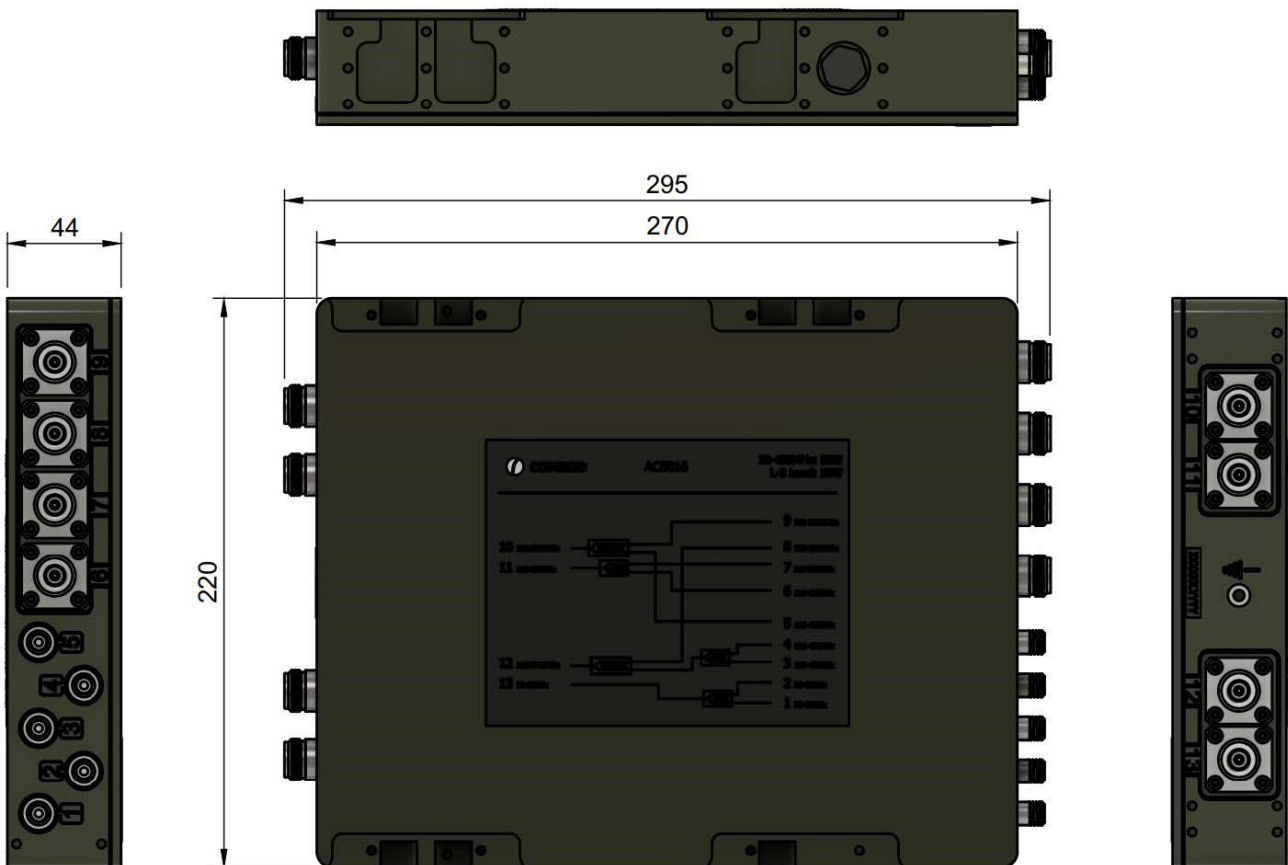
## Typical System Configuration

- 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 Specifications

<b>Design</b>	Aluminium housing, 1U tall, half-rack width
<b>Dimensions - Housing</b>	W 220 x D 270 x T 44 mm
<b>Dimensions - Overall</b>	W 220 x D 295 x T 44 mm
<b>Weight</b>	3.1 kg
<b>Temperature Range</b>	- 55°C to + 71°C
<b>Environmental</b>	IP67

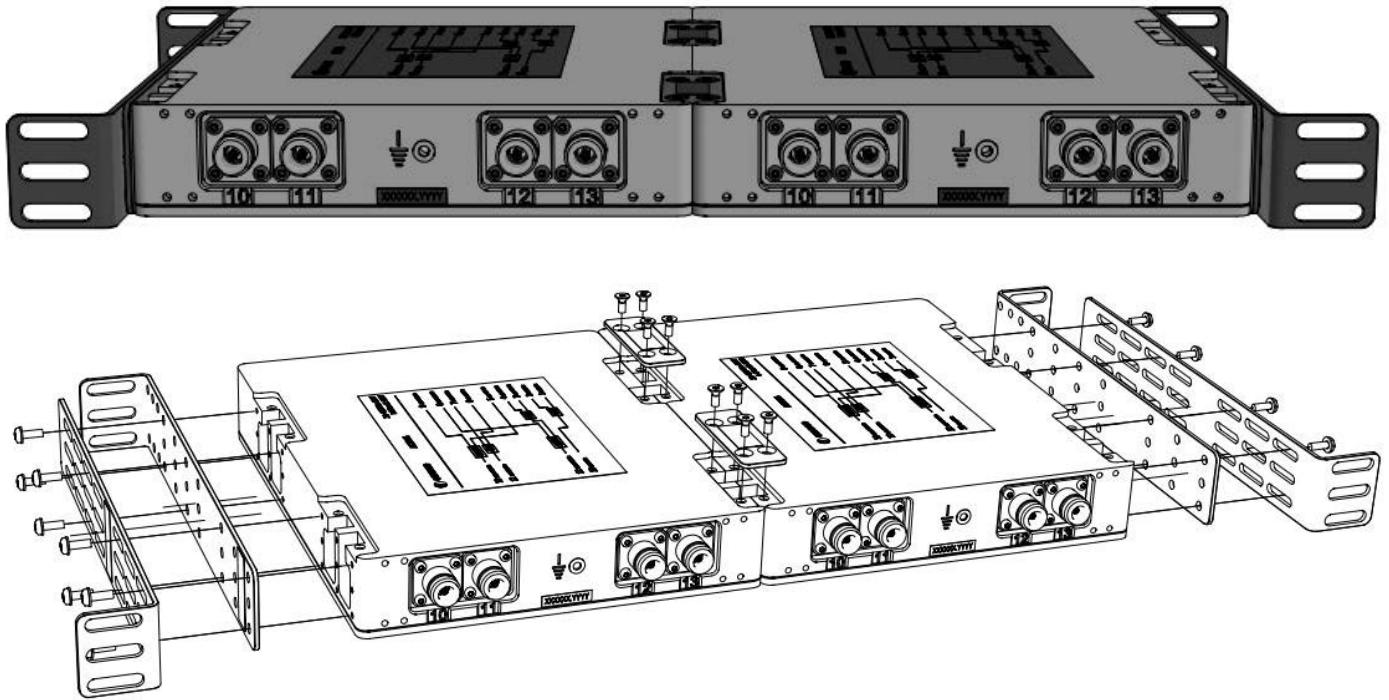


## Mounting Accessories

Comrod has a large range of bracket accessories for mounting ACS series products. The standard ACS enclosure is 44 mm tall x 220 mm wide x 270 mm 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.

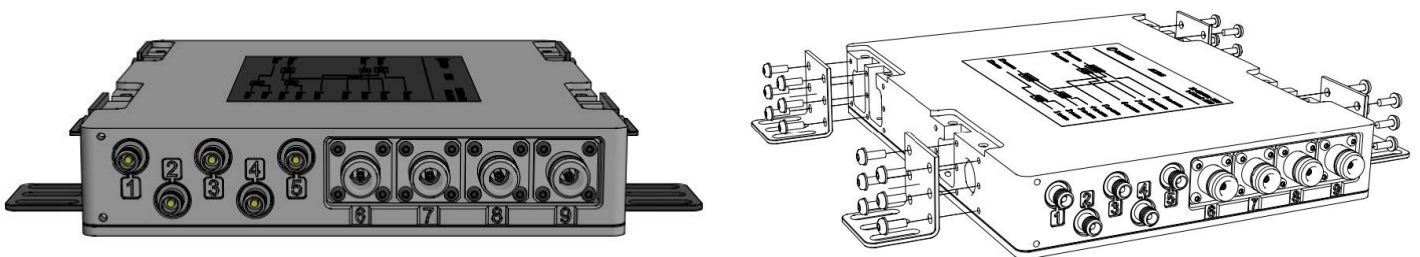
## 19" Rack Mounting

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



## Bulkhead Mounting

Single ACS combiner with bulkhead mounting brackets



January 2023

All specifications are subject to change without notice  
The information contained herein is for reference only and does not constitute a warranty of performance

Partnered Supplier



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