ACS018

Antenna Multi-Combiner, VHF/UHF/L-S Band 30-88 MHz, 225-450 MHz, 225-512 MHz, 700-2700 MHz





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, UHF, L-S Band.
- Antenna Ports: 2 x 30-512 MHz, 2 x 30-2700 MHz.
- Radio Ports: 4 x 30-88 MHz, 2 x 225-450 MHz, 2 x 225-512 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.



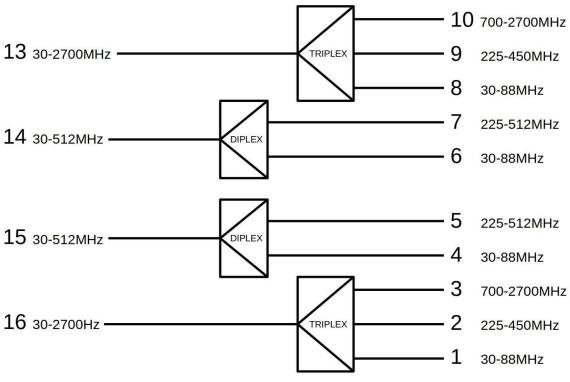


Electrical Specifications

Frequency Range	30-88 MHz		
Frequency Kange	225-450 MHz		
	225-512 MHz		
	700-2700 MHz		
VCMD		. 1 F.1	
VSWR	30-88 MHz	< 1.5:1	
	225-450 MHz	< 2:1	
	225-512 MHz	< 1.5:1	
	700-2700 MHz	< 2:1	
Nominal Impedance	50 ohm		
Power Rating (simultaneous transmission on all ports)	30-88 MHz	75 W, 30 mins	
	225-450 MHz	75 W, 30 mins	
	225-512 MHz	75 W, 30 mins	
	700-2700 MHz	50 W, 30 mins	
Diplexer / Triplexer Loss	30-88 MHz Diplexer	Port 15 to Port 4 Port 14 to Port 6	≤-0.4 dB ≤-0.4 dB
	30-88 MHz Triplexer	Port 16 to Port 1 Port 13 to Port 8	≤-0.6 dB ≤-0.6 dB
	225-512 MHz Diplexer	Port 15 to Port 5 Port 14 to Port 7	≤-0.4 dB ≤-0.4 dB
	225-450 MHz Triplexer	Port 16 to Port 2 Port 13 to Port 9	≤-1 dB ≤-1 dB
	700-2700 MHz Triplexer	Port 16 to Port 3 Port 13 to Port 10	≤ -1.6 dB ≤ -1.6 dB
Isolation Triplexer	30-88 MHz	Port 1/8 to Port 2/9	< -55 dB, typically -65 dB
	225-450 MHz	Port 1/8 to Port 2/9	<-65 dB, typically -70 dB
	225-450 MHz	Port 2/9 to Port 3/10	<-45 dB, typically-65 dB
	700-2700 MHz	Port 2/9 to Port 3/10	<-35 dB, typically-50 dB
Isolation Diplexer	30-88 MHz	Port 4/6 to Port 5/7	< -60 dB, typically -70 dB
	225-512 MHz	Port 4/6 to Port 5/7	< -65 dB, typically -70 dB
HF Protect Filter	Triplexers are equipped with additional filtering to protect VHF inputs from HF interference. Port 1 and Port 8 -5 dB @ 20 MHz, -29 dB @ 15 Mhz		
Connectors	Tx/Rx: Antenna:	Port 1 - 30-88 MHz, TNC Female Port 2 - 225-450 MHz, TNC Female Port 3 - 700-2700 MHz, TNC Female Port 4 - 30-88 MHz, TNC Female Port 5 - 225-512 MHz, TNC Female Port 6 - 30-88 MHz, TNC Female Port 7 - 225-512 MHz, TNC Female Port 8 - 30-88 MHz, TNC Female Port 8 - 30-88 MHz, TNC Female Port 9 - 225-450 MHz, TNC Female Port 10 - 700-2700 MHz, TNC Female Port 13 - 30-2700 MHz, N Type Female Port 14 - 30-512 MHz, N Type Female Port 15 - 30-512 MHz, N Type Female Port 16 - 30-2700 MHz, N Type Female	



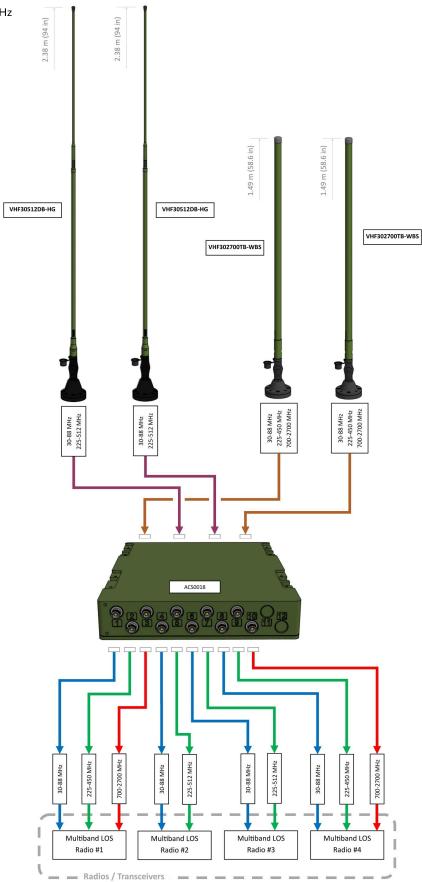






Typical System Configuration

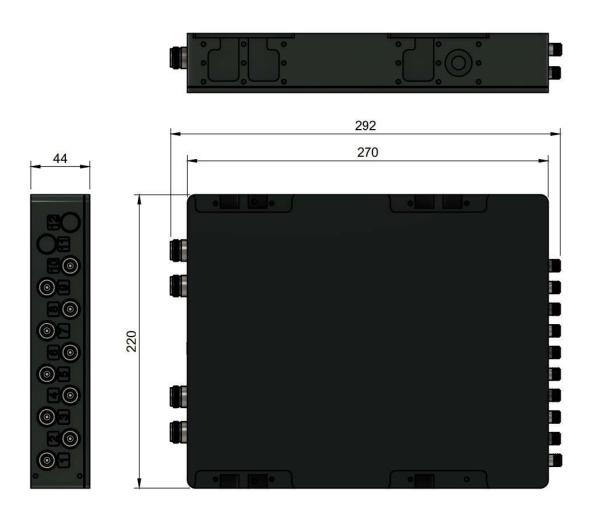
- 1 x ACS018
- 2 x VHF302700TB-WBS Antennas 30-2700 MHz
- 1 x VHF30512DB-HG Antennas 30-512 MHz
- 4 Antenna Ports / 10 Transceiver Ports





Mechanical Specifications

Design	Aluminium housing, 1U tall, half-rack (19 in) width	
Dimensions - Housing	W 220 x D 270 x T 44 mm	
Dimensions - Overall	W 220 x D 295 x T 44 mm	
Weight	3.1 kg	
Temperature Range	- 55°C to + 71°C	
Environmental	IP67	



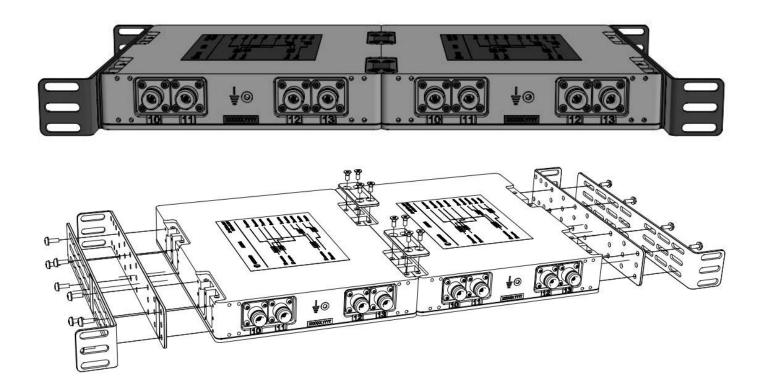


Mounting Accessories

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.

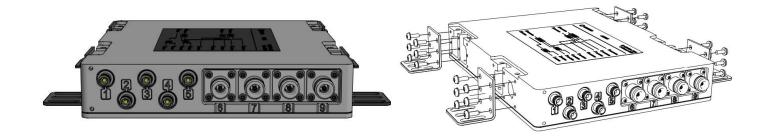
19" Rack Mounting

 $2 \times ACS$ 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



