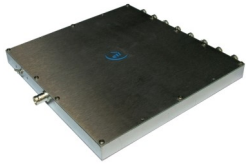




# COM08S2A-2218

RF Engineering &  
Custom Build

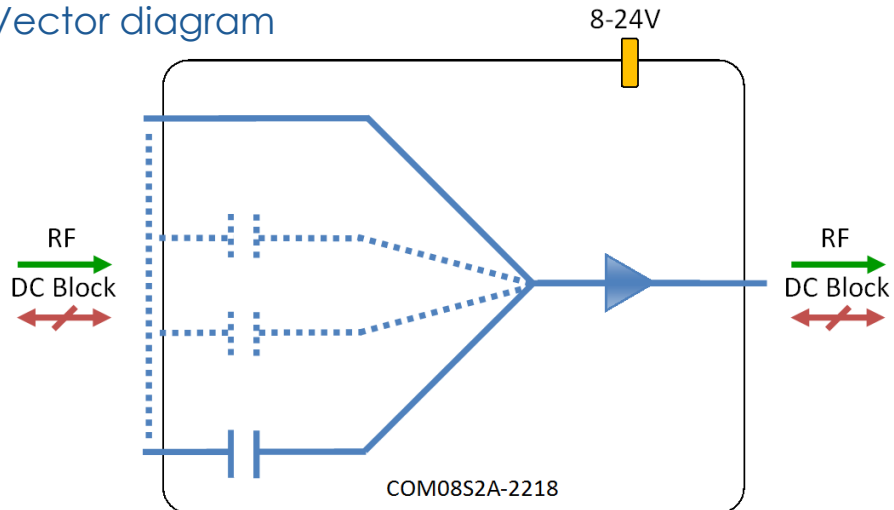
## 8-way S-band active combiner



COM08S2A-2218 is an 8-way S-band Active combiner with unity gain and DC block on all ports. It requires 8-24V external DC bias via filter-con.

This component is available with the following RF connector options: 50  $\Omega$  SMA, N-type, BNC and 75  $\Omega$  BNC or F-type.

### Vector diagram



### RF Parameters

COM08S2A-2218-xxxx	S5S5	N5N5
Frequency Range	850-2500 MHz	850-2500 MHz
RF Connectors	50 $\Omega$ SMA	50 $\Omega$ N-Type
Gain	0 $\pm$ 0.50 dB	0 $\pm$ 0.50 dB
Flatness	$\pm$ 0.6 dB	$\pm$ 0.6 dB
Input Return Loss	22 dB typ	22 dB typ
	14 dB min	14 dB min
Output Return Loss	20 dB typ	20 dB typ
	12 dB min	12 dB min
1 dB GCP*	16 dB typ	16 dB typ
	14 dB min	14 dB min
IP3	26	26
Noise Figure	15	15

1dB Gain Compression Point (1dB GCP) is in relation to output power.

Isolation: Isolation between any 2 output ports is typically 25dB .

Isolation: Isolation (reverse gain) between the common port and any of the output ports is typically 35dB.

#### BROADCAST



#### MARINE OIL & GAS



#### SNG & VSAT



#### SATELLITE TELEPORT





# 8-way S-band active combiner

### Environmental

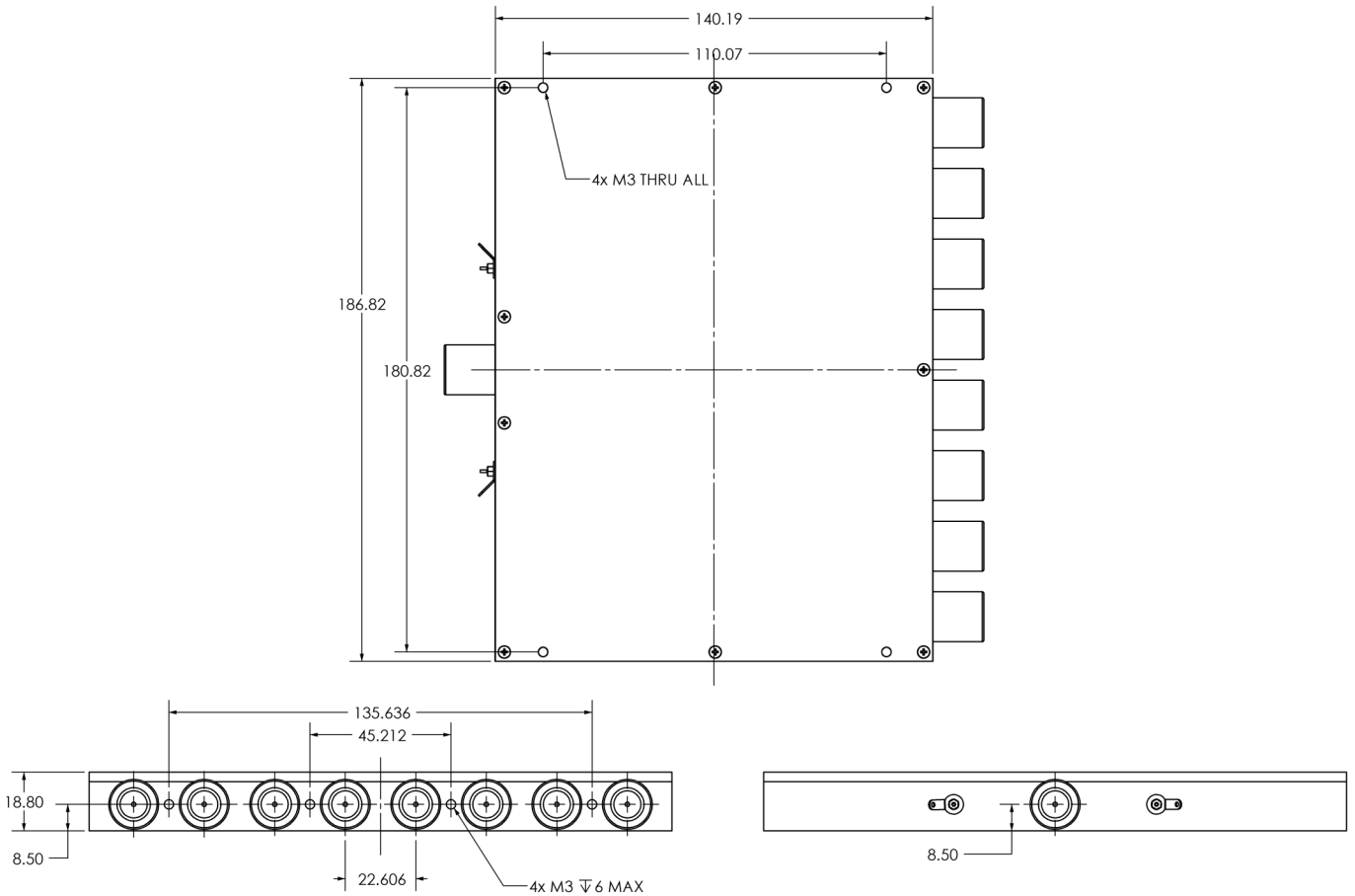
Operating Temperature	0°C to 45°C
Storage Temperature	-20°C to +75°C
Location	Indoor use Only
Humidity	85% non-condensing
Altitude	10,000 feet

### Max Operating Parameters

Input RF Power	+24 dBm (250mW)
DC Voltage	35V on any RF port
DC Current	N/A
DC Consumption	100mA Max typical 80mA

**!** Operation beyond these limits may cause instantaneous and permanent damage.

### Physical dimensions



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8-way S-band active combiner

Feature set for alternative 8-way Active L-band combiners

Model Number	Frequency (MHZ)	Gain/Frequency response	10MHz/DC functionality	Other Features
COM08L1A-2208	850 - 2150	Unity gain	All RF ports are DC blocked	
COM08L1A-2236	850 - 2150	Unity gain	Port 1 to common port is DC pass all others are DC blocked all ports 10MHz pass	
COM08L1A-2220	850 - 2150	Unity gain	Port 1 to common port is DC pass all others are DC blocked	
COM08L1A-2229	850 - 2150	Unity gain / Flat response	All RF ports are DC pass	Integral regulator
COM08L1A-2235	850 - 2150	Unity gain	All RF ports are 10 MHz & DC pass	
COM08L1A-2239	850 - 2150	Unity gain	All RF ports are DC blocked	
COM08L1A-2245	850 - 2150	Unity gain	Port 1 to common port is 10MHz pass all others are 10MHz blocked all ports DC blocked	
COM08L1A-2246	850 - 2150	Unity gain	Common port to one port 10MHz & DC pass All other ports are 10MHz & DC blocked	
COM08L1A-2247	850 - 2150	Unity gain / Flat response	Common port to one port 10MHz & DC pass All other ports are 10MHz & DC blocked	
COM08L1A-2251	850 - 2150		Common port to one port 10MHz & DC pass All other ports are 10MHz & DC blocked	
COM08L1A-2253	850 - 2150		Port 1 to common port is 10MHz pass all others are 10MHz blocked all ports DC blocked	
COM08B2A-2110	50 - 2150		All RF ports are 10 MHz pass & DC blocked	Integral regulator
COM08L1A-2266	850 - 2150	Unity gain	All RF ports are 10MHz & DC blocked	
COM08L1A-2268	850 - 2150	Unity gain / Flat response	Port 1 to common port DC pass all other ports are DC blocked all ports 10MHz blocked	

\* Custom designs available on request

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