

## 4-way L-band Active Combiner



COM04L1A-2252 is a 4-way L-band active combiner with unity gain, 10MHz/DC pass on one port and DC 10MHz block on all other output ports. It requires 8-18V external DC bias.

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

Summary table for RF performance 850 MHz to 2150 MHz

Model Numbers	Conn.	Gain (dB)	Gain flatness	1dB GCP		NF (dB)		Return Loss (dB)	
				Typical	Min	Typical	Max	Typical	Min
COM04L1A-2252 -S5S5	50Ω SMA	2 ± 2	± 1.2	15	10	14	16	18	14
COM04L1A-2252 -N5N5	50Ω N-type	2 ± 2	± 1.5	15	10	14	16	18	14
COM04L1A-2252-B5B5	50Ω BNC	2 ± 2	± 1.5	15	10	14	16	14	10
COM04L1A-2252-B7B7	75Ω BNC	2 ± 2	± 1.8	15	10	14	16	12	10
COM04L1A-2252-F7F7	75Ω F-type	2± 2.5	± 2.0	15	10	14	16	10	7

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

Maximum current consumption is 100mA, typically 80mA.

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

Where applicable 10MHz pass corresponds to 0.3dB typ. & 1dB max insertion loss, and 10MHz rejection is typically 25dB.

### Maximum acceptable operating parameters for reliable and safe operation

Parameter	Value	Comment
Input RF power	+16 dBm	Max total RF power
DC Voltage	24 V	Any RF port
Operating temperature	0 to 45 C	Indoor use only
Storage Temperature	-20 C to +75 C	
Humidity	85%	Non-condensing
Altitude	10,000 feet	Above Mean Sea level

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

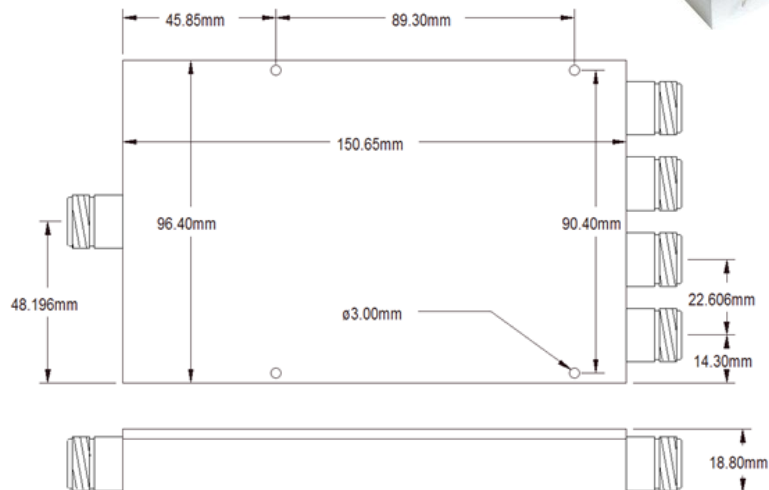
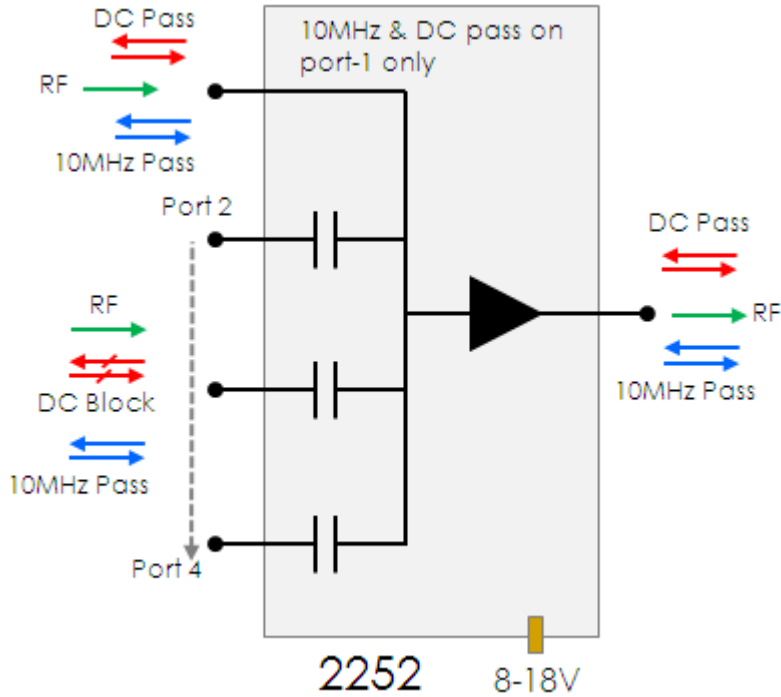


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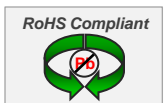


## Vector diagram & physical dimensions



ETL Systems Ltd, Coldwell Radio Station, Madley, Hereford, HR2 9NE, England

ETL Systems design, develop and manufacture specialist equipment for satellite ground stations. For a full description of the ETL product range, please see our website at [www.etlsystems.com](http://www.etlsystems.com). This product range provides the basis for meeting your specific demands.



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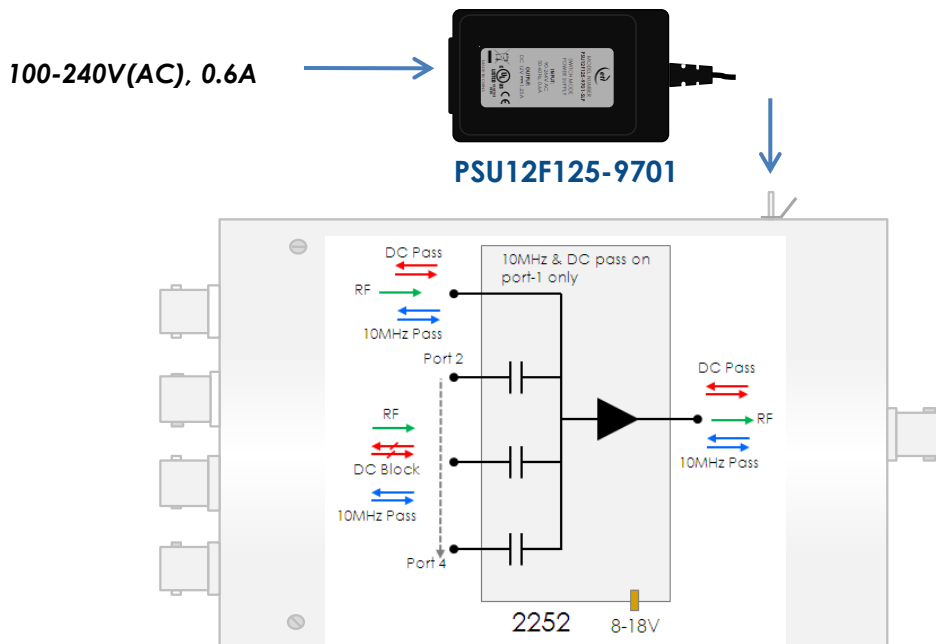
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## Alternative 4-way Active Combiners

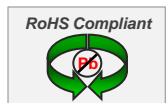
Model Number	Gain / Frequency Response	Other Features
COM04L1A-2204	0dB gain and 15dBm 1dB GCP	
COM04L1A-2222	8dB gain / flat frequency response	DC block on ALL ports
COM04L1A-2228	3dB gain / 6dB +ve slope	
COM04L1A-2230	0-5dB +ve slope	All RF ports at one end of component
COM04L1A-2252	Unity gain / flat frequency response	10MHz/DC pass on ONE port
COM04L1A-2255	Unity gain / flat frequency response	10MHz/DC pass on ONE port. Inline 8-18V DC bias on port 1
COM04F1A-2105	Unity gain / flat frequency response	Extended frequency 50 to 2800 MHz
COM04B2A-2106	Unity gain / flat frequency response	Extended frequency 50 to 2150 MHz

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