

STANCOM Pty Ltd

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HPMC-HF116A
1.5-30MHz 16Way 1U
High Performance Multicoupler

The HPMC-HF116A, is a HF 16 way multi-coupler. Offering, high performance solution for coupling up to 16 HF receivers to a single antenna. Using a unique feedback circuit, exceptional linearity performance is achieved. The unit is provided in a 19" 1U high rack mounted case. Health monitoring is provided. Local LED indicates 'STATUS', an opto-coupler output allows remote indication of 'STATUS'. Lighting protection is incorporated.

Optional Filter may be fitted to reject LF/MF and VHF 88-108 Broadcast services.



(Picture is of a similar product)

Specification:

Parameter

Limits

| | |
|---|--|
| Freq: | 1.5-30Mhz |
| Gain: | 0dB nominal (+/- 0.5dB) |
| Gain Variation: | +/- 1dB max (Typ +/-0.3dB) |
| Noise Figure: | 6dB max. (typ 4.8dB) |
| Number of inputs: | 1 |
| Number of outputs: | 16 |
| Output Intercept (OPIP):- | |
| HF | |
| Measured at 2 tones 0dBm, 7Mhz and 11Mhz | |
| | 3rd Order at 15Mhz, >35dBm min . (typ +37dBm) |
| | 2nd order at 18Mhz, >+70dBm min. (typ +76dBm) |
| LF | |
| Measured at 2 tones 0dBm, 1.9Mhz and 2.3Mhz | |
| | 3rd Order at 2.7Mhz, >35dBm min . (typ +37dBm) |
| | 2nd order at 4.2Mhz, >+72dBm min. (typ +78dBm) |
| VSWR input 50ohm: | 1.5:1 max. (Return Loss >14dB) |

| | | |
|-------------------------------|-------|----------------------------------|
| VSWR output | 50Ohm | 1.3:1 max. (Return Loss >17.7dB) |
| Isolation - Output to output: | | >30dB min (typically 35-40dB) |
| Output to input: | | >25dB min |
| Max. input signal CW | | 20dBm cont. |

Specification (cont.):

Parameter

Limits

| | |
|----------------------|--|
| Lightning Protection | 2kV 1.6ns rise time, 50ns duration |
| Power: | 15-24V DC <0.25A. (Internally regulated) |

Alarms/Protection CCT

Alarms – The multicoupler has a 'on board' health monitoring circuit which monitors the operation of the active amplifier. Should a fault occur the 'Status' LED on the front panel will change from 'Green' to 'Red' and an opto-coupler (transistor) is activated to provide remote alarm operation. The remote alarm pins are available on the rear panel (mini fit jnr) connector.

The unique design of the amplifier ensures that levels on the RF output are always <+20dBm ensuring that the following RX's are not damaged by high level RF.

Mechanical

| | | |
|-------------|---------------------|--------------------------------------|
| Connectors: | RF | BNC sockets |
| | Power/Alarm | DC connector is Molex , Mini fit Jr. |
| Dimensions: | 19", 1U rack mount, | |

Environmental

| | |
|-------------|-------------------------|
| Temp range: | operating: -10C to +55C |
| | storage: -20C to +70C |

Options: -

1 - The unit can be preceded by a HF band pass filter unit such as the FL003. This can help with strong out of band Broadcast signals.

2 – Fitment of a mains Power supply to operate of 240V 50Hz AC mains.