

HPMC-006A 20-3000MHz 8Way 1U High Performance Multicoupler

The HPMC-006A, is a 20MHz -3,000MHz, 8 way multi-coupler. It is a solution for coupling up to 8 wideband receivers to a single antenna. Using current state of the art components, exceptional linearity and low noise performance is achieved, resulting in a high dynamic range unit. 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.



Specification:

Parameter Limits

Freq: 20 - 3000 MHz Gain (Ave.): 1 + / - 1 dB nominal

Gain Variation: +/- 2dBmax Noise Figure: 9dB max.

Number of inputs: 1
Number of outputs: 8

Output Intercept (OPIP):- 3rd order > +15dBm

2nd order > +32dBm min

VSWR input 50 Ohm: 2.0:1 max. (Return Loss >10dB) VSWR output 50 Ohm 2.0:1 max. (Return Loss >10dB)

Isolation - Output to output: >15dB min
Output to input: >28dB min

Max. input signal CW +10dBm cont.

Power: OPT1. Mains 115/230V, set internally, max power 10W

OPT2. DC 24V.

Alarms 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'.

In addition 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.

Mechanical

Connectors i/p and o/p RF BNC female sockets. (SMA available on request)

Power/Alarm DC connector is Molex 4Way, Mini fit Jr.

Dimensions: 19", 1U rack mount.

Colour – Front panel is Black and the rest of the case is Natural Aluminium.

Environmental

Temp range: Operating: -10C to +55C

Storage: -20C to +70C

Humidity 5% to 95% (Non condensing)

MTBF >75,000hrs (25Deg C, Ground Benign, MIL-HDBK-217F)

Cooling Case is vented top and bottom

Options: - The complete part number is made as follows:-

HPMC-003A/(PSU)/(DC)/1U

HPMC-006A – The core specified Multicoupler

PSU - Mains PSU - uses a low noise switch mode type, 115-230VAC

DC – Allows external powering via a DC source. Eq DC24 = 24 DC external power.

1U – The whole package is in a 1U chassis.

Note when AC and DC are both specified AC is the master supply and the DC is the secondary supply. An internal relay switches between the two.