

## HF Matrix Switch System

MS-4001-32X32-HF-HIA



HF and Controller Chassis  
(10RU High)



HF High Intercept Amplifier  
Chassis (12RU High)

### System Features

- ◆ Full Fan Out, Non - Blocking
- ◆ System Control: RS232, Ethernet
- ◆ Redundant Hot-Swappable Power Supplies
- ◆ Modular Expandable Design
- ◆ Robust Design for Military and High End Commercial Applications

| Specification               | Conditions   | Min | Typ         | Max         | Units              |
|-----------------------------|--|-----|-------------|-------------|--------------------|
| Frequency Range             |  | 1.5 |             | 32          | MHz                |
| Gain                        |  | -1  | 0           | +1          | dB                 |
| Gain Flatness               |  | -1  | 0           | +1          | dB                 |
| Isolation                   | In/In  | 60  | 65          |             | dB                 |
|                             | In/Out   | 60  | 65          |             | dB                 |
|                             | Out/Out (different input)  | 60  | 65          |             | dB                 |
|                             | Out/Out (same input)   | 36  | 40          |             | dB                 |
| VSWR                        |  |     | 1.4:1       | 1.5:1       |                    |
| Impedance                   |  |     | 50          |             | $\Omega$           |
| Noise Figure                |  |     | 8.5         | 10          | dB                 |
| OP1dB compression           | Output   | +8  | +11         |             | dBm                |
| OPIP3                       | Output   | +32 | +35         |             | dBm                |
| OPIP2                       | Output   | +68 | +70         |             | dBm                |
| Maximum input signal        | Input  | +27 | +33         |             | dBm                |
| Out of band Input Rejection | 10 dB @ 1 MHz  |     |             |             |                    |
|                             | 10 dB @ 35 MHz   |     |             |             |                    |
|                             | 20 dB >= 40 MHz  |     |             |             |                    |
| Temperature (Op)            |  | 0   |             | 50          | $^{\circ}\text{C}$ |
| AC Voltage                  | Note: selectable on Amplifier chassis.<br>Auto select on controller chassis.                     | 100 | 120 @ 1100W | 230 @ 1100W | VAC                |
| Mechanical                  | System Consist of<br>One Controller Chassis<br>One 32x32 Switch Chassis<br>Two Amplifier Chassis |     |             |             |                    |