



16 x 32 IF / L-band Valiant Switch Matrix / Router

- Typical applications:**
- Live news & sport traffic for smaller applications
 - SNG or Outside Broadcast Trucks
 - RF content acquisition for smaller TVRO & IPTV headends
 - RF distribution in larger cruise liners or luxury yachts
 - Remote controlled unmanned satcom sites



50 - 2450 MHz
operating frequency range



Local control & monitoring via front panel push buttons & LCD display



Compact 16 x 32 matrix housed in a 3U high chassis



Remote control & monitoring via serial & RJ45 Ethernet port with SNMP & web browser interface



Resilience from dual redundant, hot-swap power supplies, hot-swap RF modules & hot-swap CPU





Technical specifications and operating parameters

| RF Parameters | | | | | |
|------------------------------|--|---|----------|------------|---------|
| Capacity | 16 inputs x 32 outputs | | | | |
| Routing | Distributive, non-blocking | Any input can be connected to any number of outputs | | | |
| Frequency Range | 50-2450 MHz (IF / L-band) | | | | |
| RF Connectors | 50Ω SMA | 50Ω BNC | 75Ω BNC | 75Ω F-type | |
| Gain | 0±2.5 dB | 0±2.75 dB | 0±3.0 dB | 0±3.25 dB | |
| Gain Flatness | 50-2150MHz | ±2 dB | ±2 dB | ±2 dB | ±2 dB |
| | Full Band | ±2.5 dB | ±2.5 dB | ±3 dB | ±3 dB |
| | Any 36MHz | ±0.5 dB | ±0.6 dB | ±0.65 dB | ±0.8 dB |
| Input Return Loss | Typical | 15 dB | 15 dB | 12 dB | 12 dB |
| | Minimum | 12 dB | 12 dB | 10 dB | 10 dB |
| Output Return Loss | Typical | 15 dB | 15 dB | 12 dB | 12 dB |
| | Minimum | 12 dB | 12 dB | 8 dB | 8 dB |
| 1dB Gain Compression (Input) | 0 dBm Typical input power | | | | |
| OIP3 | ≥ + 10 dBm Typical 3rd order intercept point, output power | | | | |
| Isolation | I/P - O/P | ≥60 dB typical | | | |
| | I/P - I/P | ≥60 dB | | | |
| | O/P - O/P | ≥70 dB | | | |
| Noise Figure | 20 dB typical 22 dB maximum | | | | |
| Switching Time | ≤100 ms From when command is received by interface until the connection is made. | | | | |

| Environmental | | |
|-----------------------|--------------------------|----------------------|
| Operating temperature | 0 to 55°C | |
| Location | Indoor use only | |
| Storage temperature | -20°C to +75°C | |
| Humidity | 20 to 90% non-condensing | |
| Altitude | 10,000 ft AMSL | Above mean sea level |

| Power | | |
|----------------|----------------------|----------------------|
| AC Power | 85-264Vac 50/60Hz | Fused 2A |
| AC Consumption | 75W | Total AC input (Max) |
| LNB Power | None | |
| PSU | Dual redundant | Diode OR |
| Hot-swap PSU | Yes | |

| System Control | |
|----------------|---|
| Local Control | Via Front Panel LCD display and push buttons |
| Remote Control | Via RS232/485 serial port and RJ45 Ethernet port 10/100 Base T. TCP/IP, SNMP and web browser interface. |

| Physical | |
|------------|---------------------------------|
| Dimensions | 3U high x 300mm deep x 19" wide |
| Weight | 12 kg |
| Colour | White 00-E-55 semi-gloss |

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.