

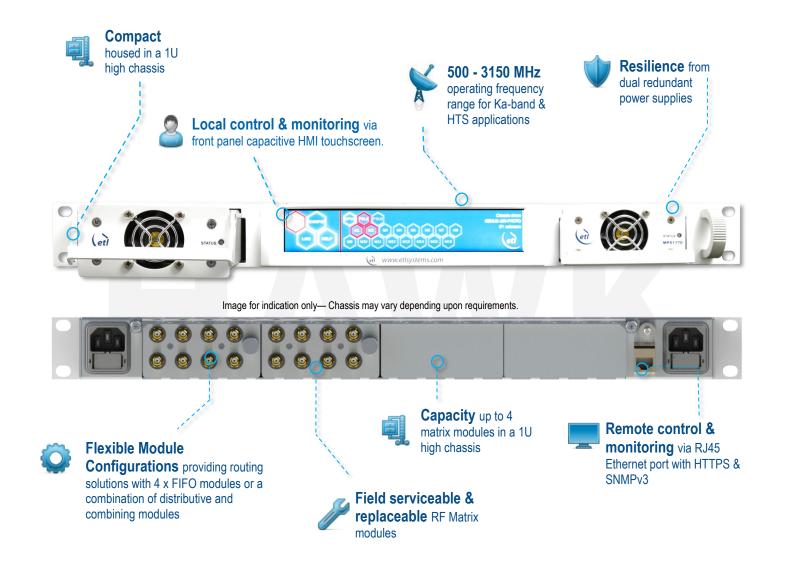
Hawk Series 4 x 4 Extended L-band Matrix

For Uplink & Downlink applications

The 1U Genus chassis has capacity for up to 4 off 4x4 Hawk matrix modules – which can be combining (fan-in) or distributive (fan-out) or FIFO (fan-in, fan-out) – for uplink and downlink applications. The Genus chassis can be fitted with any combination of modules depending on application, but is ideally suited for smaller LEO gateways with small number of modems, where modem redundancy is required, smaller number of modems and antennas and remotely accessed teleports. Other module types from the Genus range such as Frequency Converters or RF over Fibre can also be fitted into the chassis.

Typical applications:

- Ka/HTS gateway terminals
- LEO gateways
- Small teleports
- Uplink and downlink applications
- Oil & Gas
- Deployable VSAT terminals



















Model Number: HWK-G1S-15-F44-XXXX

| | | RF Parameters |
|---|---------------|--|
| Routing | | FIFO (Fan-In Fan-out) |
| Frequency Range | | 500 to 3150 MHz (Extended L-band) |
| Capacity | | Up to 4 matrix modules in 1U parent chassis – each 4 x Input and 4 x Output. |
| Switching Time | | < 50ms (From receipt of a command to implementation of path change) |
| Power Consumption | | <5W |
| RF Connectors | | 50 Ω SMA |
| Gain (dB) Typ, mean across band | | 0±1 |
| Gain Flatness (dB) | 850-2450 MHz | ±1 |
| | 500-2850 MHz | ±1.25 |
| | 500-3150 | ±2.5 |
| Any 36 MHz | 500-2850 MHz | ±0.25 |
| | 2850-3150 MHz | ±0.5 |
| Input Return Loss (dB) | Тур. | 14 |
| | Min | 10 |
| Output Return Loss (dB) | Тур. | 14 |
| | Min | 10 |
| Isolation (dB) Min. between any two ports | Input-Input | <2150 MHz 60 dB, >2150 MHz 50dB |
| | Output-Output | <2150 MHz 60 dB, >2150 MHz 50dB |
| | Input-Output | <2150 MHz 55 dB, >2150 MHz 50dB |
| Noise Figure (dB) | Maximum | 15 dB, with one input routed to one output |
| 1dB GCP (dBm) | Minimum. | +5 dBm , Output power, |
| OIP3 (dBm), Minimum. | <2450 MHz | + 20 dBm |
| | >2450 MHz | +18 dBm |
| OIP2 (dBm) ,Minimum | <2450 MHz | + 34 dBm |
| | >2450 MHz | +26 dBm |
| Group Delay | | <1.0 ns |
| PSU Redundancy | | Dual redundant and alarmed Diode OR. (see parent chassis datasheet for more details) |
| Matrix Module | | FIFO: Field replaceable |
| | | System Control |
| Remote Control & Monitoring | | Ethernet via RJ45 with HTTPS & SNMPv3, 10BaseT/100 Base Tx. ETL TCP/IP, SNMP & Web browser interface. Via parent chassis |
| | | Physical & Environment |
| Dimensions | | 4 x Genus 1U slots |
| Weight / Colour | | <0.5 kg / RAL9003—White (Semi-matte) |
| Temperature | | Operating: 0 to 45°C / Storage: -20°C to +75°C |
| Location | | Indoor use only |
| Humidity | | 20 to 90% non-condensing |
| Altitude | | 2,000 feet AMSL (Operational) 8,000 feet AMSL (Storage) Above Mean Sea Level |
| Spec Version | | 1.0 |

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.

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