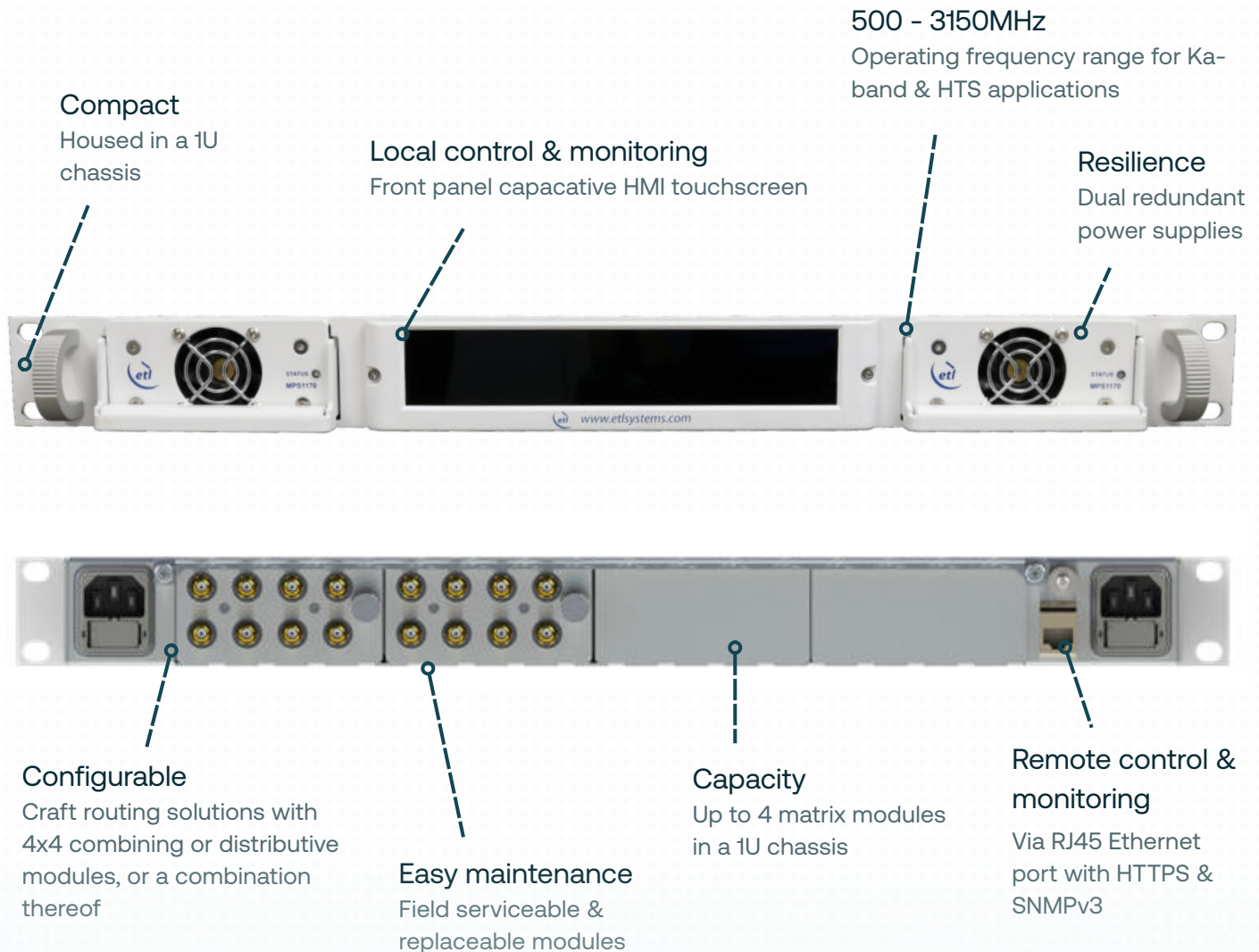


Hawk Series 4x4 Extended L-band Matrix

for Uplink 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) 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.



RF Parameters			
Routing		Combining	
Frequency Range		500 to 3150MHz (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, Typ., mean across band		0±1 dB	
Gain Flatness		850-2450MHz: ±1.0 dB	500-3150MHz: ±2.5 dB
Any 36MHz		850-2450MHz: ±0.15 dB	500-3150 MHz: ±0.25 dB
Input Return Loss		Typ. 14 dB	Min. 10 dB
Output Return Loss		Typ. 14 dB	Min. 10 dB
Isolation Min. between any 2 ports	Input-Input	55 dB	
	Output-Output	55 dB	
	Input-Output	50 dB	
Noise Figure	850 - 2450MHz	Typ. 22 dB, with one input routed to one output	
	500 - 3150MHz	Typ. 25 dB, with one input routed to one output	
1dB GCP Output power, Typ.	850 - 2450MHz	+15 dBm	
	500 - 3150MHz	+12 dBm	
OIP3, Typ.	850 - 2450MHz	+30 dBm	
	500 - 3150MHz	+25 dBm	
OIP2, Typ.		+40 dBm	
Group Delay		<1.0 ns	
PSU Redundancy		Dual redundant and alarmed. Diode OR.	
Matrix Module		Combining: 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 & Environmental			
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		1.2	

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.