

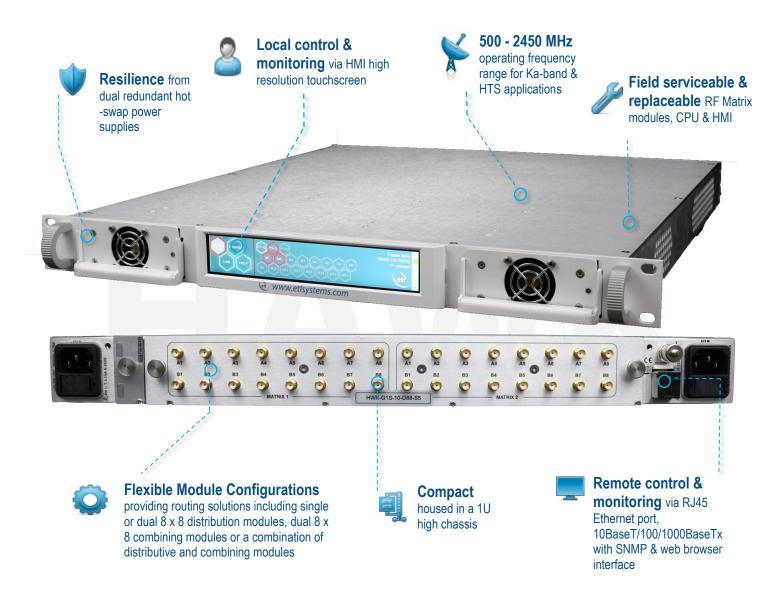
Model Number: HWK-G1S-10 & HWK-G1S-10C

Hawk Series Dual 8 x 8 Extended L-band Matrix For Uplink & Downlink applications

Typical applications:

- Small Ka/HTS gateway terminals
- LEO gateways
- Oil & Gas
- Deployable VSAT terminals

The 1U Hawk Matrix has capacity for two 8x8 field replaceable matrix cards – which can be the combining HWK-10C (fan-in) or distributive HWK-10 (fan-out) – for uplink and downlink applications. The Hawk can be fitted with any combination of cards depending on application, but is ideally suited for smaller gateways with multiple modems and one or two antennas. Model number is dependent upon full matrix module configuration. Single 8x16 & 16x8 configurations are also available - please enquire.

















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Model Number: HWK-G1S-10 & HWK-G1S-10C

Model number is dependant upon full matrix module configuration.

		RF Parameters		
Routing		HWK-G1S-10 - Distributive	HWK-G1S-10C - Combining	
Frequency Range		500 to 2450 MHz (Extended L-band)		
Capacity		2 Matrix Cards – each 8 x Input and 8 x Output.		
Configurations		2 x Distributive (D88D88) / 2 x Combining (C88C88) / 1 x Distributive & 1 x Combining (D88C88) / Single 8x8 Module (D88 or C88)		
Switching Time		< 50ms (From receipt of a command to implementation of path change)		
Input & Output Ports		50Ω SMA (All ports DC Blocked)		
Gain		0±1 dB typical, mean across band	0±1 dB typical, mean across band	
Gain Flatness		±1.5 dB	±1.5 dB	
Any 36MHz		±0.25 dB	±0.25 dB	
Input Return Loss		Typical: 18 dB, Minimum: 14 dB	Typical: 18 dB, Minimum: 14 dB	
Output Return Loss		Typical: 18 dB, Minimum: 14 dB	Typical: 18 dB, Minimum: 14 dB	
Isolation Minimum between any 2 ports	Input-Input	60 dB	60 dB	
	Output-Output	60 dB	60 dB	
	Input-Output	55 dB <2150MHz, 50 dB >2150MHz	55 dB <2150MHz, 50 dB >2150MHz	
Noise Figure		16 dB typical, with one input routed to one output	24 dB typical, with one input routed to one output	
1dB GCP Gain Compression Point, output power	<850 MHz	+0 dBm	+12 dBm	
	<1500 MHz	+3 dBm	+10 dBm	
	>1500 MHz	+5 dBm	+6 dBm	
OIP3 3rd order intercept point	<1500 MHz	Typical 18 dBm, Minimum 16 dBm	Typical 28 dBm, Minimum 25 dBm	
	>1500 MHz	Typical 22 dBm, Minimum 20 dBm	Typical 25 dBm, Minimum 20 dBm	
Group Delay		<1.0 ns across operational bandwidth	<1.0 ns across operational bandwidth	
AC Input / AC Consumption		AC Input: 85-264Vac 50/60Hz	AC Consumption: 150W	
Input RF Power		+20 dBm Absolute Maximum.		
Spec Version		1.1	1.1	

	System Control & Reliability	
Local Control	HMI capacitive touch screen: Field replaceable	
Remote Control & Monitoring	Ethernet via RJ45, 10BaseT/100 Base Tx. ETL TCP/IP, SNMP & Web browser interface.	
PSU Redundancy	Dual redundant and alarmed. Diode OR. Hot swappable	
Matrix Card	Field replaceable	
CPU	Field replaceable	
MTTR	20 minutes (15 minutes to retrieve spare part and 5 mins to replace) Applies to LRUs only and assumed in house stock	
MTBF	Chassis, Switch Card & CPU (TBC)	

Physical & Environment		
Dimensions	1U high x 600mm deep x 19" wide	
Weight / Colour	<10 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	2,000m AMSL (Operational) 8,000m AMSL (Storage) Above Mean Sea Level	

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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