Hawk Series 8x16 Extended L-band Matrix

for Downlink applications

The 1U Hawk Matrix has capacity for up to two field replaceable matrix cards – which can be combining (fan-in) or distributive (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.

Single or dual 8x8 fan-out or fan-in, and single16x8 fan-in configurations are also available - please enquire.

500 - 2450MHz

Operating frequency range for Ka-band & HTS applications

Resilience

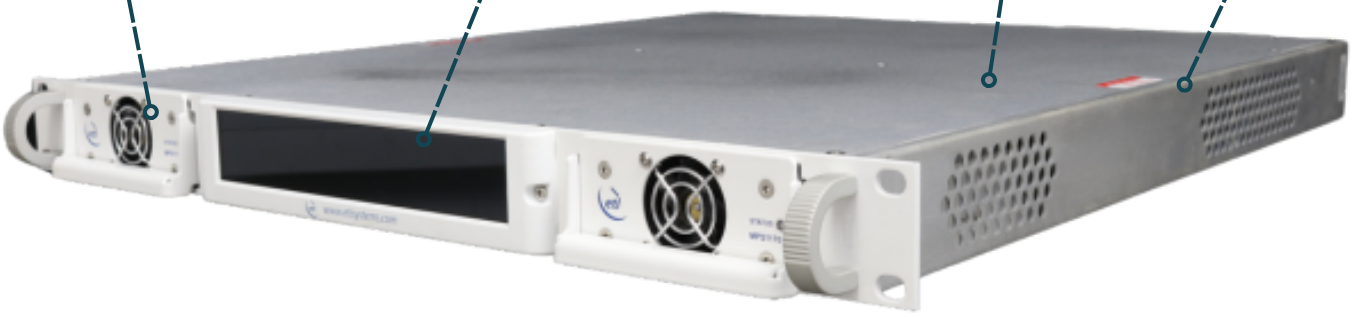
Dual redundant hot swap power supplies

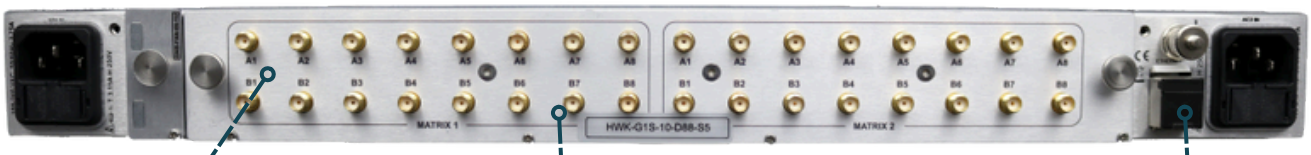
Local control & monitoring

Front panel capacative HMI touchscreen

Compact

Housed in a 1U chassis





Configurable

Providing routing solutions including single or dual 8x8 distribution modules, dual 8x8 combining modules or a combination of distributive and combining modules

Easy maintenance

Field serviceable & replaceable modules, CPU & HMI

Remote control & monitoring

Via RJ45 Ethernet port with HTTPS & SNMPv3

RF Parameters		
Routing		HWK-G1S-10 Distributive Any input can be connected to any number of outputs
Frequency Range		500 to 2450MHz (Extended L-band)
Capacity		8 x input and 16 x output
Switching Time		< 50ms (From receipt of a command to implementation of path change)
Input & Output Ports		50Ω SMA (All ports DC blocked)
Gain (dB) Typ., mean across band		0±1
Gain Flatness (dB)		±1.5
Any 36MHz		±0.25
Input Return Loss (db)	Typ.	20
	Min.	18
Output Return Loss (dB)	Typ.	18
	Min.	12
Isolation (dB) Min. between any 2 ports	Input-Input	60
	Output-Output	60
	Input-Output	<2150 MHz 55dB, >2150 MHz 50dB
Noise Figure (dB)	Typical	14 typ., 16 max. (one input routed to one output)
1dB GCP (dBm)		0, output power
OIP3, 3rd order intercept point	<1500 MHz	Typ. 18 dBm, Min. 16dBm
	>1500 MHz	Typ. 22 dBm, Min. 20dBm
Group Delay		<1.0 ns across operational bandwidth
AC Input / AC Consumption		AC Input: 85-264Vac 50/60Hz, AC Consumption: 150W
Input RF Power		+20dBm absolute maximum
System Control & Reliability		
Remote Control & Monitoring		Ethernet via RJ45 with HTTPS & SNMPv3, 10BaseT/100 Base Tx. ETL TCP/IP, SNMP & Web browser interface. Via parent chassis.
Local Control		HMI capacitive touch screen, field replaceable
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
Physical & Environmental		
Dimensions		1U high x 550mm 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		2,000 feet AMSL (Operational) 8,000 feet AMSL (Storage) *Above Mean Sea Level*
Spec. Version		1.1

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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