

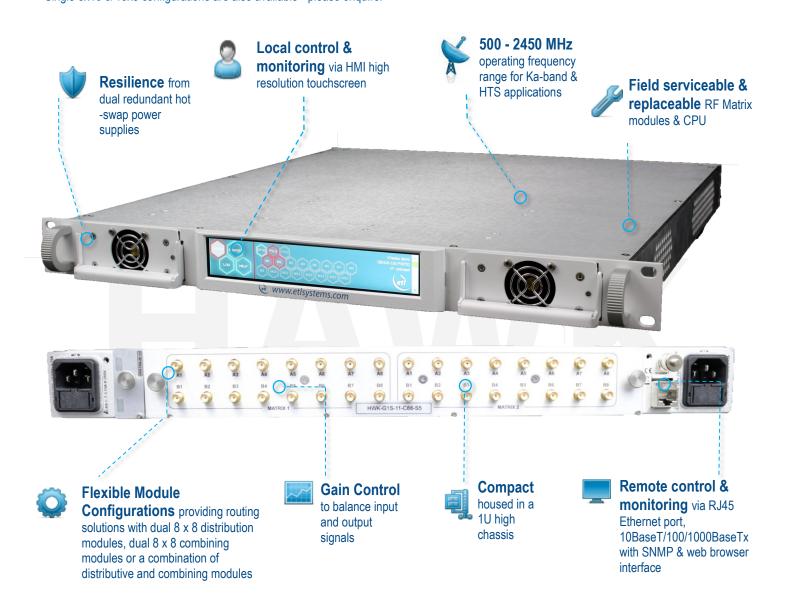
Downlink applications

Hawk Series Dual 8 x 8 Extended L-band Matrix with gain control for Uplink &

Typical applications:

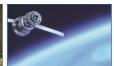
- Small Ka/HTS gateway terminals
- LEO gateways
- Oil & Gas
- Deployable VSAT terminals

The 1U Hawk Matrix has capacity for two 8x8 field replaceable matrix cards – which can be 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. Model number is dependent upon full matrix module configuration. Single 8x16 & 16x8 configurations are also available - please enquire.



















Model Number: HWK-G1S-11 & HWK-G1S-11C

Model number is dependant upon full matrix module configuration

	RF Parameters	
Routing	Distributive	Combining
Frequency Range	500 to 2450 MH	Iz (Extended L-band)
Capacity	Up to 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 8 x8 Module (D88 or C88)	
Switching Time	< 50ms (From receipt of a command to implementation of path change)	
Gain (dB)	Min Gain 0±1 Max Gain 5±1 Gain control at input ports	Min Gain 0±1 Max Gain 5±1 Gain control at output ports.
Gain Control Steps (dB)	0.5±0.15	0.5±0.15
Gain Flatness (dB)	±1.5	±1.5
Any 36 MHz	±0.25	±0.25
nput Return Loss Typ. dB) Min	20 18	18 16
Output Return Loss Typ. dB) Min	20 18	18 16
Input-Input solation Output-Output dB) Input-Output	60 60 55<2150 MHz 50>2150 MHz	60 60 55<2150 MHz 50>2150 MHz
nput RF Power	+20 dBm. Absolute Maximum.	
nput & Output ports	50Ω SMA (All ports DC Blocked)	
Noise Figure (dB) max @ all gain settings	16	<850MHz = 30 <1500MHz = 26 >1500MHz = 24
1dB GCP (dBm) <850 MHz Output power, @ <1500 MHz all gain >1500 MHz settings	-5 dBm 0 dBm +4 dBm	+12 dBm +10 dBm +8 dBm
OIP3 (dBm) <850 MHz @ all gain settings <1500 MHz >1500 MHz	8 12 16	32 28 22
Group Delay	<1.0 ns	<1.0 ns
C Input	85-264Vac 50/60Hz	
C Consumption	150W	
PSU Redundancy	Dual redundant and alarmed Diode OR. Hot swappable	
Matrix Card	Distributive & Combining options: Field replaceable	
Spec Version	1.2	1.2
	System Control	
ocal Control	HMI touch screen: Field replaceable	
Remote Control & Monitoring	Ethernet via RJ45, 10BaseT/100 Base Tx. ETL TCP/IP, SNMP & Web browser interface.	
PU	Field replaceable	
	Physical & Environment	
Dimensions	1U high x 600mm deep x 19" wide	
Veight / Colour	<10 kg / RAL9003—White (Semi-matte)	
emperature	Operating: 0 to 45°C / Storage: -20°C to +75°C	
ocation	Indoor use only	
Humidity	20 to 90% non-condensing	
Altitude	10,000 feet AMSL (Operational) 30,000 feet 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.

ETL SYSTEMS LIMITED Coldwell Radio Station Madley Hereford England HR2 9NE TELEPHONE +44 (0)1981 259020

info@etlsystems.com

FACSIMILE +44 (0)1981 259021

WEB www.etlsystems.com









