



ETL Systems

New technologies
in RF distribution

HWK-G2S-20-S5S5

Hawk Series 8 x 32 Distributive Extended L-Band Matrix For Downlink applications

Typical applications:

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

8x32 Distributive extended L-Band Matrix. Ideally suited to for smaller to mid-size gateways with multiple modems and a smaller numbers of antennas, where modem redundancy is required, or remotely accessed teleports / gateways.



Local control & monitoring via HMI high resolution touchscreen



500 - 2450 MHz operating frequency range for Ka-band & HTS applications



Field serviceable & replaceable RF Matrix module, CPU & HMI



Resilience from dual redundant hot-swap power supplies and hot-swap fan module



Compact housed in a 2U high chassis



Remote control & monitoring via RJ45 Ethernet port, 10BaseT/100/1000BaseTx with SNMP & web browser interface





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RF Parameters		Redundancy & Hot Swap		
Frequency Range	500 to 2450 MHz (Extended L-band)	PSU Redundancy	Dual redundant and alarmed	
Capacity	8 x 32 Distributive	CPU Redundancy	N/A	
Switching Time	< 50 ms (From receipt of a command to implementation of path change)	Matrix card	Field replaceable	
AC Input	85-264Vac 50/60Hz	Control & Monitoring		
AC Consumption	100W	Local Control & Monitoring	HMI Capacitive Touch Screen	
Input & Output Ports	50Ω SMA (All ports DC Blocked)	Remote Control & Monitoring	Ethernet via RJ45, 10BaseT/100 Base Tx. ETL TCP/IP protocol, SNMP, Built-in Web server	
Input RF Power (Absolute maximum)	+24 dBm	System Control & Reliability		
Gain (typical, mean across band)	0±1 dB	MTTR	20 minutes 15 minutes to retrieve spare part and 5 mins to replace.	
Gain Flatness	±1.5 dB	MTBF (hours)	Chassis >250,000 Matrix Card >250,000 CPU >250,000	
Any 36MHz	±0.25 dB	Environmental		
Input Return Loss	Typical: 18 dB, Minimum 2GHz: 14 dB, Minimum 2.45GHz: 12dB	Operating Temperature	0 to 45°C	
Output Return Loss	Typical: 18 dB, Minimum 2GHz: 14 dB, Minimum 2.45GHz: 12dB	Gain Variation vs Temperature	0.05dB/°C	
Isolation Minimum between any 2 ports	Input-Input	60 dB	Storage Temperature	-20°C to +75°C
	Output-Output	60 dB	Location	Indoor use only
	Input-Output	55 dB <2150MHz, 50 dB >2150MHz	Humidity	20 to 90% non-condensing
Noise Figure	14 dB (Typical, with one input routed to one output)	Altitude (operational)	2,000m AMSL	
1dB GCP (1dB Gain Compression point, output power)	0 dBm	Altitude (storage)	8,000m AMSL	
OIP3 (3rd order intercept point)	Typical 18 dBm, Minimum 16 dBm	Physical		
Group Delay	<1.0 ns across operational bandwidth	Weight	<10 kg	
Spurious	<80 dBm (Inband)	Dimensions	2U high x 550mm deep x 19" wide	
Spec Version	0.1	Front Panel Colour	RAL9003 – White (Semi-Matte)	

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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