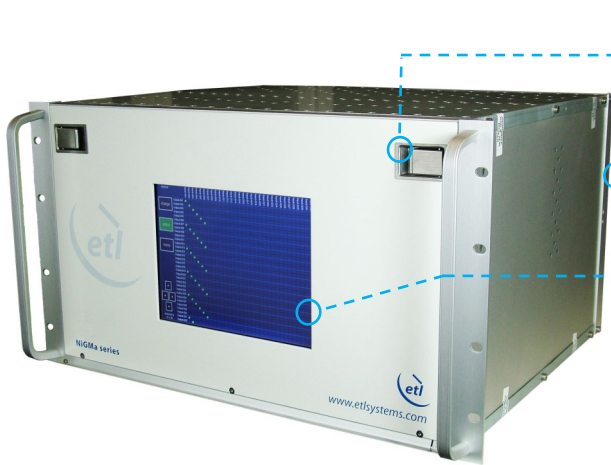




# 32 x 32 IF Distributive Enigma Switch Matrix / Router

**Typical applications:**

- RF content acquisition for TVRO & IPTV headends
- Signal monitoring of satellite traffic
- Remote controlled unmanned satcom sites



**50 - 200 MHz** operating frequency range



**Compact** up to 32 inputs x 32 outputs housed in a 6U high chassis



**Local control & monitoring** via front panel VGA touchscreen



**Self diagnostics** with continuous monitoring of amplifiers, CPU's & PSU's



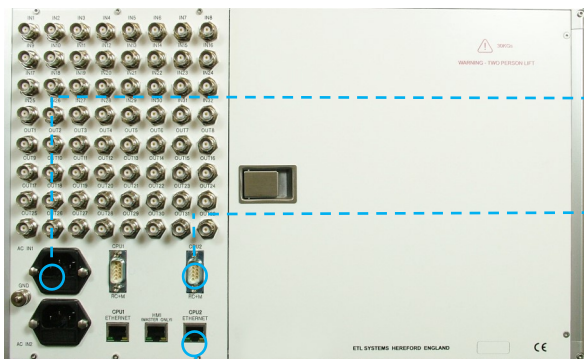
**Expansion** in single increments or with additional matrix modules for larger systems



**Minimal impact from failure** with hot-swap single input & output RF cards, dual power supplies, dual CPU's, fans & VGA interface



**Resilience** from dual redundant power supplies & CPU modules



**Dry contact alarm port & serial communications** for amplifier & power supply status



**Remote control & monitoring** via RJ45 Ethernet port with SNMP & web browser interface





**Technical specifications and operating parameters**

RF Parameters				
Capacity	32 inputs x 32 outputs, fully populated			
Routing	Distributive (fan-out), DC blocking	Any input can be connected to any number of outputs		
Frequency Range	50-200 MHz (1F)			
Gain	0 ± 1 dB typical, mean across band			
Impedance & RF connectors	50Ω BNC	50Ω SMA	75Ω BNC	75Ω F-type
Flatness	50-200MHz	±1.0 dB	±1.0 dB	±1.2 dB
	Any 36MHz	±0.25 dB	±0.25 dB	±0.50 dB
Input Return Loss	20 dB typ	20 dB typ	12 dB typ	12 dB typ
Output Return Loss	20 dB typ	20 dB typ	12 dB typ	12 dB typ
Isolation Minimum between any 2 ports	I/P - I/P	80 dB		
	O/P - O/P	80 dB		
	I/P - O/P	80 dB		
Noise Figure	20 dB Typical, 1 input routed to 1 output			
1dB Gain Compression Point	+5 dBm output power			
OIP3	+16 dBm			

Physical	
Dimensions	6U high x 450mm deep x 19" wide
Weight	35 kg
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.

System Control	
Local Control	Touchscreen & VGA Display
Remote Connection	Via RS232/485 serial port and RJ45 Ethernet port 10/100 Base T. TCP/IP, SNMP & Web browser interface.
Alarms	Dry contact (D-type) & Ethernet (RJ45) for PSU & Amp. status
SNMP Traps	For alarms & monitoring
Comms / Power Failure	Retains settings
Remote Control Software	Available

Power		
PSU Power	85-264Vac 50-60Hz	Fused 2A
AC Consumption	100W	Max. consumption at steady state
LNB Power	None	
PSU	Dual redundant & alarmed	Diode OR
Hot-swap PSU	Yes	
MTBF	Chassis	271,444 hours
	Switch card	270,297 hours
	Splitter card	317,227 hours
		Chassis excludes HMI & RF cards

Environmental	
Operating temperature	0 to 45°C
Location	Indoor use only
Storage temperature	-20°C to +75°C
Humidity	20 to 90% non-condensing
Altitude	10,000 feet AMSL