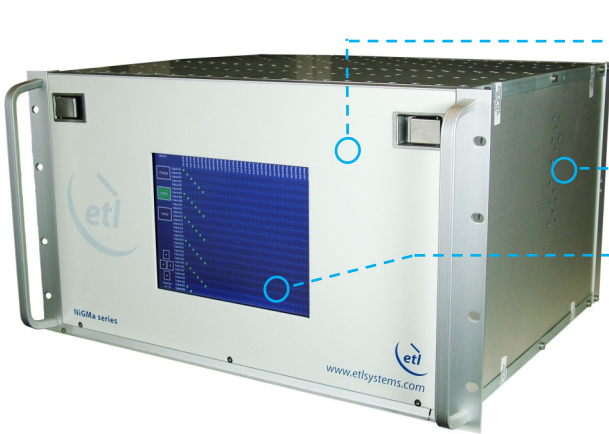




# 32 x 32 Enigma Broadband Distributive Switch Matrix / Router

**Typical applications:**

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



**50 - 1000 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



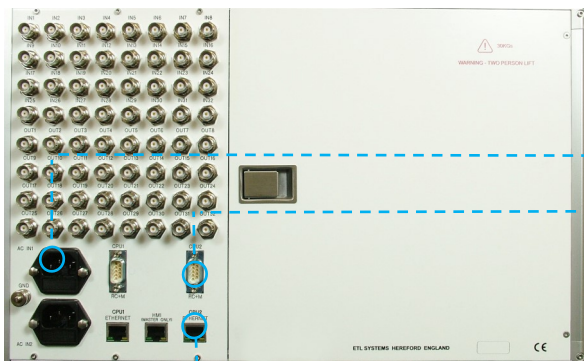
**Self diagnostics** with continuous monitoring of amplifiers, CPU's & PSU's



**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			
Routing		Distributive (fan-out), non-blocking		Any input can be connected to any number of outputs	
Frequency		50 to 1000MHz (Broadband)			
Connectors & Impedances		50Ω SMA	50Ω BNC	75Ω BNC	75Ω F-type
Gain (dB)		0±1 nominal	0±1 nominal	0±1 nominal	0±1 nominal
Gain Flatness	Full band	±1.0 dB	±1.0 dB	±1.5 dB	±1.5 dB
	Any 36MHz	±0.25 dB	±0.25 dB	±0.5 dB	±0.5 dB
Input Return Loss	Typical	20 dB	20 dB	14 dB	14 dB
	Min.	16 dB	16 dB	12 dB	10 dB
Output Return Loss	Typical	20 dB	20 dB	14 dB	14 dB
	Min.	16 dB	16 dB	12 dB	10 dB
Isolation	Input-output	75 dB			
	Input-input	75 dB			
	Output-output	65 dB			
Noise Figure		20 dB typical			
1dB Gain Compression Point		+5 dBm at unity gain			
OIP3 (dBm)		Typ. 19dBm, min 16dBm			
Group Delay		<1ns			
Input RF Power		+20 dBm Absolute Maximum			

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

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	
PSU	Dual redundant	
AC Input	85-264Vac 50/60Hz	
Hot-swap PSU	Yes	
AC Consumption	100W (max. consumption at steady state)	
MTBF (hours)	Chassis	170,740
	Switch Card	270,297
	Splitter Card	317,227

Physical	
CPU Redundancy	Dual Redundant
PSU Redundancy	Dual Redundant and Alarmed
Dimensions	6U high x 450mm deep x 19" wide
Weight	29 kg Fully Populated as 32x32
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.