



ETL Systems
Excelling in RF Engineering

Model Number:
VLT-10-xxxx

16 x 32 IF / L-band Valiant Switch Matrix / Router with LNB powering

Typical applications:

- Live news & sport traffic for smaller applications
- SNG or Outside Broadcast Trucks
- RF content acquisition for smaller TVRO & IPTV headends
- RF distribution in larger cruise liners or luxury yachts
- Remote controlled unmanned satcom sites



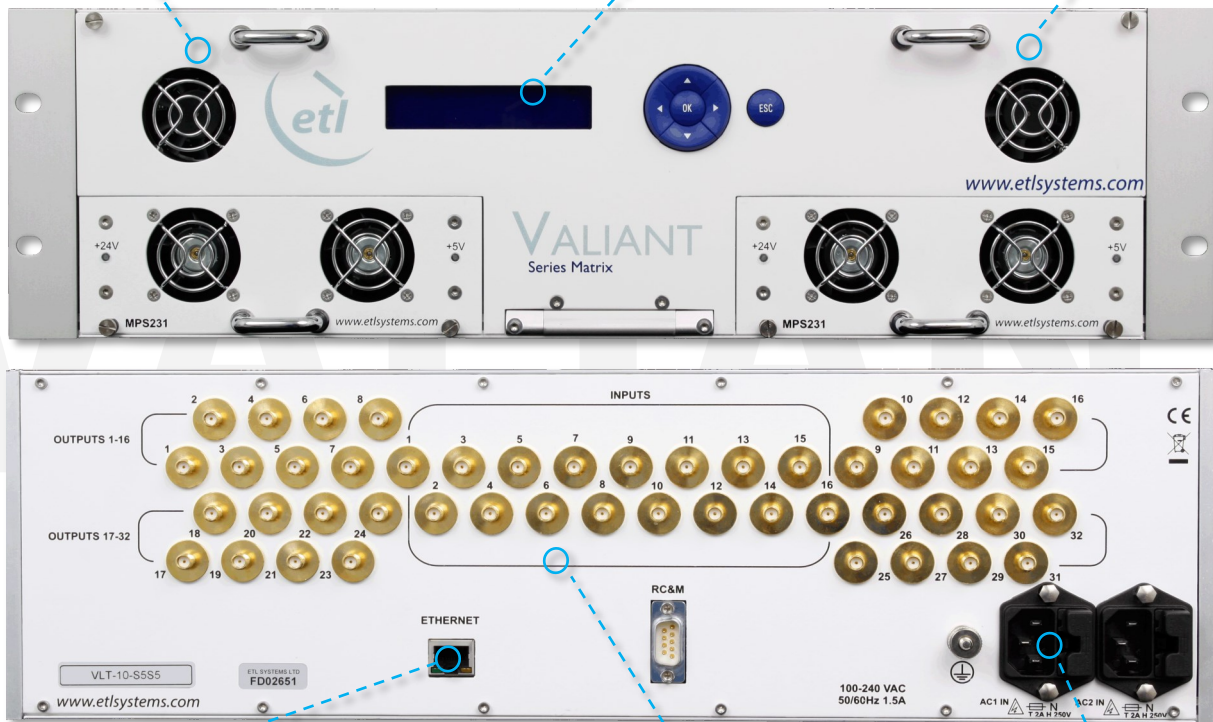
50 - 2450 MHz
operating frequency range



Local control & monitoring
via front panel push buttons & LCD display



LNB Powering
0/13/18V & 22 KHz tone



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



Compact 16 x 32 matrix
housed in a 3U high chassis



Resilience from dual
redundant, hot-swap power
supplies, hot-swap RF modules &
hot-swap CPU





Technical specifications and operating parameters

RF Parameters					
Capacity		16 inputs x 32 outputs			
Routing		Distributive, non-blocking		Any input can be connected to any number of outputs	
Frequency Range		50-2450 MHz (IF / L-band)			
RF Connectors		50Ω SMA	50Ω BNC	75Ω BNC	75Ω F-type
Gain Flatness	50-2150MHz	±2.0 dB	±2.0 dB	±2.0 dB	±2.0 dB
	Full Band	±2.5 dB	±2.5 dB	±3.0 dB	±3.0 dB
	Any 36MHz	±0.5 dB	±0.6 dB	±0.65 dB	±0.8dB
Input Return Loss	Typical	15 dB	15 dB	12 dB	12 dB
	Minimum	12 dB	12 dB	10 dB	10 dB
Output Return Loss	Typical	15 dB	15 dB	12 dB	12 dB
	Minimum	12 dB	12 dB	8 dB	8 dB
Gain		0±2.5 dB	0±2.75 dB	0±3.0 dB	0±3.25 dB
1dB Gain Compression (Input)		0 dBm Typical input power			
OIP3		≥ + 10 dBm Typical 3rd order intercept point, output power			
Isolation	I/P - O/P	≥60 dB typical			
	I/P - I/P	≥60 dB			
	O/P - O/P	≥70 dB			
Noise Figure		20 dB typical, 22dB maximum			
Switching Time		≤100 ms From when command is received by interface until the connection is made.			

Environmental		
Operating temperature	0 to 55° C	
Location	Indoor use only	
Storage temperature	-20° C to +75° C	
Humidity	20 to 90% non-condensing	
Altitude	10,000 ft AMSL	Above mean sea level

Power		
AC Power	85-264Vac 50/60Hz	Fused 2A
AC Consumption	300W	Total AC input (Max)
LNB Power	0/13/18V @ 500 mA, 22 KHz tone	
PSU	Dual redundant	Diode OR
Hot-swap PSU	Yes	

System Control	
Local Control	Via Front Panel LCD display and push buttons
Remote Control	Via RS232/485 serial port and RJ45 Ethernet port 10/100 Base T. TCP/IP, SNMP and web browser interface.

Physical	
Dimensions	3U high x 300mm deep x 19" wide
Weight	12 kg
Colour	White 00-E-55 semi-gloss

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.