



# 16x1 IF/Extended L-band LS Series Monitoring Switch with local & remote control

**Typical applications:**

- Signal carrier monitoring of satellite feeds
- Redundancy switching for main applications
- Remote controlled unmanned satcom sites
- Routing signal to multiple IRDs

ETL's LS series range of monitoring switches are available in capacities of 8x1, 16x1, 32x1, 1x8, 16x1 and 32x1. Options with high 1 dB gain compression point are also available for high power applications.

LS switches use solid state switching and so benefit from long life and excellent RF performance.

Other options in the LS Series Range include optional front panel -20dB monitoring port and optional Power over Ethernet (PoE).



**Improved Performance**  
with faster switching time,  
improved return loss & isolation



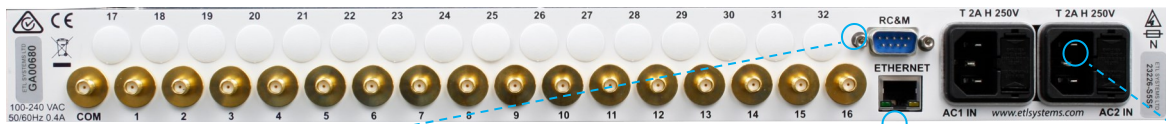
**Local control & monitoring** via new front panel push buttons & display



**50 - 2450 MHz**  
operating frequency range



**Compact**  
housed in a 1U high chassis



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



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



**Resilience** from dual redundant power supplies





**Technical specifications and operating parameters**

RF Parameters						
Capacity		16-way Switch				
Frequency Range		50-2450 MHz (IF/Extended L-band)				
RF Connectors		50Ω SMA	50Ω BNC	75Ω BNC	75Ω F-type	
Gain		0±1 dB	0±1 dB	0±1 dB	0±1 dB	
Gain Flatness		Full band	±1.0 dB	±1.0 dB	±1.5 dB	
		Any 36MHz	±0.3 dB	±0.3 dB	±0.5 dB	
Input Return Loss	200-2450 MHz	Typical	24 dB	24 dB	14 dB	
		Minimum	20 dB	20 dB	8 dB	
	50-200 MHz	Typical	20 dB	20 dB	14 dB	
		Minimum	16 dB	16 dB	8 dB	
Output Return Loss		Typical	20 dB	20 dB	14 dB	
		Minimum	18 dB	18 dB	8 dB	
Isolation		O/P-O/P	80 dB	Min. between any two output ports		
		O/P-I/P	80 dB	Min. between any output port and input port		
Noise Figure		18 dB Maximum (16 dB Typical)				
1dB GCP		+10 dBm	1dB gain compression point, output power			
OIP3		+20 dBm	3rd order intercept point, output power			
Spurious	In band	< -95 dBm	Typical < -105 dBm			
	Out of band	< -80 dBm	10 MHz - 3 GHz			
Input RF Power		20 dBm	Absolute maximum			
MTBF		>100,000 Hrs				

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

Power		
PSU Power	85-264Vac 50-60Hz	Fused T 2A H
AC Consumption	6W	Max. consumption at steady state
PSU Redundancy	Dual redundant & alarmed	Diode OR. Not hot swap

System Control		
Local Control	Via front panel LCD & push buttons	
Remote Control & Monitoring	Serial (RS232 or RS422/485) and Ethernet (RJ45-100BASE-TX) with SNMP & web browser interface	Enables control and monitoring and alarms status
Alarms	Dry contact (D-type) & Ethernet (RJ45) for PSU & Amplifier status	

Physical	
Dimensions	1U high x 350mm deep x 19" wide
Weight	4 kg
Colour	White 00-E-55 semi-gloss

**PRELIMINARY SPECIFICATIONS**

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.

