



1 x 16 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 IRD's.

ETL's LS series range of monitoring switches are available in capacities of 1x8, 1x16, 1x32 and 8x1, 16x1 and 32x1. Options with high 1dB 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).

50 - 2450 MHz operating frequency range

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

Compact housed in a 1U high chassis

Remote control & monitoring via serial (RS232 or 422/485) and Ethernet (RJ45) on rear panel

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

Resilience from dual redundant power supplies

1:8 L Band Switch
www.etlsystems.com

STATUS
PSU1
PSU2
ETHERNET

RC&M
ETHERNET
100-240 VAC
50/60Hz 0.4A

17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

COM 1 2 3 4 5 6 7 8

AC1 IN T 2A H 250V AC2 IN T 2A H 250V





Technical specifications and operating parameters

PRELIMINARY

| RF Parameters | | | | | |
|---------------------------|----------------------------------|----------|---|---------------------|---------|
| Capacity | 16 way Switch | | | | |
| Frequency Range | 50-2450 MHz (IF/Extended L-band) | | | | |
| Impedance & RF Connectors | 50Ω SMA | 50Ω BNC | 75Ω BNC | 75Ω F-type | |
| Gain | 0±1 dB | 0±1 dB | 0±1 dB | 0±1 dB | |
| Flatness | Full Band | ±0.8 dB | ±0.8 dB | ±1.5 dB | ±1.5 dB |
| | Any 36 MHz | ±0.3 dB | ±0.3 dB | ±0.5 dB | ±0.5 dB |
| Input Return Loss | Typical | 20 dB | 20 dB | 14 dB | 14 dB |
| | Minimum | 18 dB | 18 dB | 8 dB | 8 dB |
| Output Return Loss | Typical | 20 dB | 20 dB | 14 dB | 14 dB |
| | Minimum | 18 dB | 18 dB | 8 dB | 8 dB |
| Isolation | O/P-O/P | 75 dB | Minimum between any two output ports. | | |
| | O/P-I/P | 75 dB | Minimum between any output port and input port. | | |
| Noise Figure | 13 dB | | Typical | | |
| 1 dB GCP | 10 dBm | | 1 dB Gain Compression point, output power | | |
| OIP3 | 26 dBm | | 3rd order intercept point, output power. | | |
| Spurious | In Band | <-95 dBm | | Typically <-105 dBm | |
| | Out of band | <-80 dBm | | 10MHz-3GHz | |
| MTBF | >100,000 hours | | | | |

| Environmental | |
|-----------------------|--------------------------|
| Operating temperature | 0 to 45°C |
| Location | Indoor use only |
| Storage temperature | -20°C to +75°C |
| Humidity | 20 to 90% non-condensing |

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

| Power | | |
|----------------|-----------------------------|----------------------------------|
| PSU Power | 85-264Vac 50-60Hz | Fused T 2A H |
| AC Consumption | 6W | Max. consumption at steady state |
| PSU Redundancy | Dual Redundant and Alarmed. | Diode OR. Not hot-swap. |
| Input RF Power | 16 dBm | Absolute maximum. |

| System Control | |
|-----------------------------|---|
| Local Control | Via Front Panel LCD and push buttons |
| Remote Control & Monitoring | Via RS232 or RS422/485 serial port & RJ45 Ethernet port (100BASE-TX) with SNMP & web browser interface. |
| Alarms | Dry contact (D-type) & Ethernet (RJ45) for PSU & Amplifier status |

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.