



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



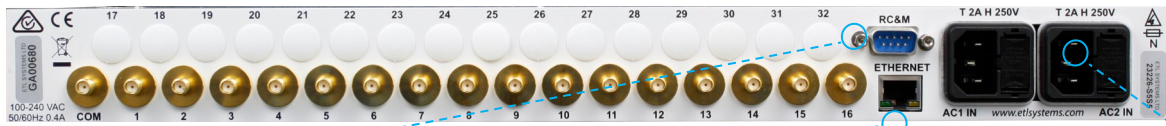
Local control & monitoring via new front panel push buttons & display



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 | ±1.5 dB |
| | | Any 36MHz | ±0.3 dB | ±0.3 dB | ±0.5 dB | ±0.5 dB |
| Input Return Loss | Inputs 1-16 50-2450 MHz | Typical | 21 dB | 21 dB | 14 dB | 14 dB |
| | | Minimum | 16 dB | 16 dB | 8 dB | 8 dB |
| | Inputs 17-32 200-2450 MHz | Typical | 15 dB | 15 dB | 12 dB | 12 dB |
| | | Minimum | 13 dB | 13 dB | 8 dB | 8 dB |
| | Inputs 17-32 50-200 MHz | Typical | 20 dB | 20 dB | 14 dB | 14 dB |
| | | Minimum | 16 dB | 16 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 | 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 |

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.