

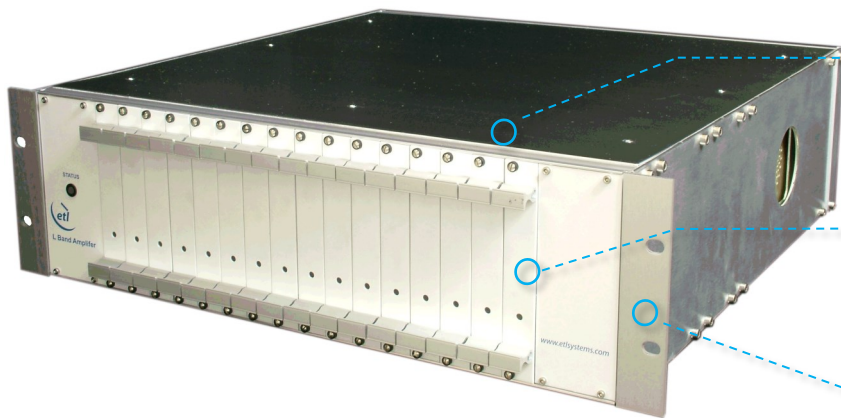


16 channel L-band Line Amplifier

with variable gain, slope compensation, LNB powering & 10 MHz distribution

Typical applications:

- Cable loss offset for long runs between teleport & MCR.
- Signal loss offset from passive RF splitters or combiners.
- General satcoms - teleports, video head-ends, TVRO.



Module independent variable gain & slope compensation selectable 10 dB or 17dB gain & 0-7dB slope



10 MHz Distribution via external injection port to individual channels



LNB Powering 18V, can be turned on/off for each feed



Remote control & monitoring via RS232 serial or RJ45 Ethernet port with SNMP & web browser interface



Local monitoring via LED status



950 - 2150 MHz operating frequency range



Resilience from dual redundant power supplies & hot-swap amplifier & power supply modules





Technical specifications and operating parameters

RF Parameters			
Capacity	16 channel		
Frequency Range	950-2150 MHz (L-band)		
Variable Gain Range	Selectable 10 or 17 dB ± 2 dB	Gain is selectable at 10 or 17 dB by remote control for each channel independently. Note this is at 950 MHz. At 2150 MHz, the gain will be 10 or 17 with 0 dB slope compensation & 17 or 24 dB with +7 dB slope compensation. All gain levels are ± 2 dB.	
Flatness	950-2150 MHz	±1.5 dB	0 dB slope selected
	Any 36 MHz	±0.5 dB	
Slope compensation	950-2150 MHz	Selectable 0 or 7 dB positive	May be selected individually for each channel remotely only
Noise Figure (20°C)	At 10 dB gain & 0 dB slope	<13 dB	
	At 10 dB gain & 7 dB slope	<13 dB	
	At 17 dB gain & 0 dB slope	<11 dB	
	At 17 dB gain & 7 dB slope	<11 dB	
Linearity 1 dB Gain Compression Point (out)	At 10 dB gain & 0 dB slope	>12 dBm	
	At 10 dB gain & 7 dB slope	>12 dBm	
	At 17 dB gain & 0 dB slope	>12 dBm	
	At 17 dB gain & 7 dB slope	>12 dBm	
Input Return Loss	15 dB	10 dB worst case	
Output Return Loss	15 dB	10 dB worst case	
Isolation	I/P - O/P	>70 dB	
	I/P - I/P	>80 dB	
	O/P - O/P	>70 dB	
L-Band isolation between L-band input & 10 MHz input ports	>70 dB		
10 MHz injection	External injection port on rear panel (50Ω BNC)	10 MHz internal ACTIVE splitter distributes to all RF in ports. Output amplifiers on splitter to help linearity, & resilience. 10MHz may be switched on or off for each RF channel - remote only.	
10 MHz insertion loss	0 dB ± 1 dB	Variation between channels also ± 1 dB. Nominal input level + 2 dBm.	

Environmental	
Operating temperature	0 to 45°C
Location	Indoor use only
Storage temperature	-20°C to +75°C
Humidity	85% non-condensing

Power		
AC Power	85-264Vac 50/60Hz	Fused 4A, dual mains inlet.
LNB Power	18V @ 500 mA per channel	Can be turned on/off for each feed remotely only. Self resetting Polyfuse for each LNB output.
PSU	Dual redundant	Diode OR
Hot-swap PSU	Yes	From Rear Panel

System Control		
Local Control	Summary alarm LED on front panel (total of one LED for amplifier or PSU failure) & a power on LED. Status LED on the two PSUs on the rear panel for each PSU.	
Remote Control & Monitoring	Via RS232/485 serial port & RJ45 Ethernet port 10/100 Base T. TCP/IP, SNMP & Web browser interface.	Allows monitoring of amplifier current (16 channels plus 10MHz splitter), LNB current, with settable 'normal' level & alarm triggered when actual deviates by 20%. Remote control of LNB & 10MHz on/off per channel, gain level & slope compensation selection.
Remote Protocol	10 Ethernet/IPV4 & a DB-9 RS232 port	Serial ASCII protocol & similar protocol via Ethernet; & SNMP; & WBI. This will show & allow changes in settings & show alarm status on PSUs, amps, LNB current. Allow 'normal' level to be set.

Physical	
RF Connectors & Impedances	75Ω BNC, Female
Dimensions	3U high x 450mm deep x 19" wide
Weight	6 kg
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.