



# Dual 4-way L-band Splitter

with 18V LNB powering, internal/  
external 10MHz supply, serial &  
Ethernet remote control & monitoring

**Typical applications:**

- Satellite operators, VSAT, teleports, and broadcasters
- IPTV & DTH headend content distribution
- RF distribution, and optimum satellite signal quality

**10 MHz Supply**  
from an internal or external source

**Active or Passive splitter option** as amplifiers can be switched off

**LNB Powering**  
18V DC, 500 mA always on

**850 - 2150 MHz**  
operating frequency range.

**Local monitoring**  
via front panel status LEDs for amplifier, power supply, 10MHz level and LNB current



**Compact**  
2 x 4-way splitters housed in a 1U high chassis

**Remote monitoring**  
via RJ45 Ethernet & RS232/485 serial port with SNMP & web browser interface

**DIL Switch control** for 10MHz reference source & amplifiers (on/off)

**Resilience** from dual redundant power supplies





### Technical specifications and operating parameters

RF Parameters			
Frequency Range	850-2150 MHz (L-band)		
Insertion Gain	Passive	-9 dB ± 1 dB	Nominal
	Active	2 dB ± 2 dB	
Flatness over 850-2150 MHz	Passive	± 1 dB	
	Active	± 1 dB	
Return Loss	12 dB typical		In & out
1 dB Compression Point	+ 10 dBm		
Isolation	Passive	20 dB	Minimum between any 2 output ports
	Active	18 dB	
Noise Figure	15 dB		
10 MHz External Supply			
RF Ports	50Ω , BNC		
Insertion Loss	10 ± 2 dB		
Return Loss	> 10 dB		
10 MHz Internal Supply (Ovenised crystal oscillator)			
Frequency	10 MHz		
10 MHz level	-5 ± 3.5 dBm	All RF ports connected into 50 Ω system	
Harmonics	2nd Harmonic	-50 dBc	
	3rd Harmonic	-60 dBc	
Warm up time	2 minutes	Warm up time at 25°C to < ± 1 x 10 <sup>-7</sup>	
Frequency stability	Over temperature	< ± 3x 10 <sup>-8</sup>	
	Over time/ year	< ± 5x 10 <sup>-8</sup>	
	Short term stability/sec	< ± 1x 10 <sup>-11</sup>	
Stability over temperature	± 3x 10 <sup>-8</sup>	Over 0-50°C	
Aging	Per day	< ± 2x 10 <sup>-9</sup>	
	Per year	< ± 5x 10 <sup>-7</sup>	
Phase Noise	< 85 dBc/Hz @ 1 Hz		
	< 115 dBc/Hz @ 10 Hz		
	< 140 dBc/Hz @ 100 Hz		
	< 150 dBc/Hz @ 1000 Hz		
	< 155 dBc/Hz @ 10000 Hz		

Environmental	
Operating temperature	0 to 50°C
Location	Indoor use only
Storage temperature	-30°C to +70°C
Humidity	85% non-condensing

Power		
PSU Power	85-264Vac 50-60Hz	
PSU	Dual redundant	Single mains inlet
Hot-swap PSU	No	
AC Consumption	35W	Max. consumption at steady state
LNB Power	18V DC, 500 mA via common (RF in ) port	Always on

System Control	
Local Control	Via rear panel DIL Switch for 10MHz supply and amplifiers (on/off)
Local Monitoring	Via front panel status LEDs
Remote Control	Via RS232/485 serial port and RJ45 Ethernet port for 10MHz signal threshold
Remote Monitoring	Via RS232/485 serial port and RJ45 Ethernet port 10/100 Base T. TCP/IP, SNMP & Web browser interface.
Alarms	Via serial (RS232/482) & Ethernet (RJ45) for LNB current, 10 MHz level, PSU & Amplifier status

Physical	
Input & output RF connector	N-type
Input & output impedance	50Ω
Dimensions	1U high x 450mm deep x 19" wide
Weight	7 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.