ETL Systems
Excelling in RF Engineering

Model Number:
H0108D1ULA-22461-XXXX

8-way Hybrid Splitter & Combiner L-band Active Dextra Series with 10MHz pass, dual redundant amplifiers (OPT-R version), DC pass (OPT-D version), switchable LNB powering & -20 dB monitoring port

Typical applications:
- Satellite operators, VSAT, teleports and broadcasters
- High resilience RF distribution where optimum satellite signal quality is required
- 850-2450 MHz to cover Ka-band and HTS applications

LNB Powering 13/18V (on splitter)

850 - 2450 MHz operating frequency range. HTS ready.

LNB Current Monitoring allows customer settable alarm

Monitoring via front panel LEDs to indicate LNB & power supply status

10MHz Pass (on port 1)

-20dB monitor port to measure input signal levels

Compact 8-way splitter & 8-way combiner housed in a 1U high chassis

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

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

Resilience from dual redundant power supplies & amplifiers (optional)

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Technical specifications and operating parameters

RF Parameters					
Capacity		8-way Splitter & 8-way Combiner			
Front Panel Monitor		50Ω SMA		-20 dB, 16 dB return loss.	
Frequency Range		850-2450 MHz (Extended L-band)			
RF Connectors & Impedances		50Ω BNC	50Ω SMA	75Ω F-Type	75Ω BNC
Isolation 850-2250MHz (Minimum between any two multi ports)	Typical	28 dB	28 dB	28 dB	28 dB
	Minimum	24 dB	24 dB	24 dB	24 dB
Isolation 2250-2450MHz (Minimum between any two multi ports)	Typical	28 dB	28 dB	24 dB	24 dB
	Minimum	24 dB	24 dB	22 dB	22 dB
Gain Flatness	Full Band	±0.8 dB	±0.8 dB	±1.0 dB	±1.0 dB
	Any 36MHz	±0.25 dB	±0.25 dB	±0.3 dB	±0.3 dB
Group Delay Variation	Full Band	2 ns maximum			
	Any 36MHz	1 ns maximum			
Amplification		Single path amplifier			
Amplifier Redundancy	OPT-R	Dual redundant amplifier. Selectable hot or cold standby, 1:1 redundancy with auto switch-over based on amplifier current monitoring.			
	OPT-D	DC pass port 1 to common port.			
	OPT-RD	Dual redundant amplifier & DC pass port.			
Gain		0±1.0 dB mean across band			
SPLITTER					
Input Return Loss	Typical	20 dB	20 dB	20 dB	20 dB
	Minimum	16 dB	16 dB	16 dB	16 dB
Output Return Loss	Typical	21 dB	21 dB	21 dB	21 dB
	Minimum	16 dB	16 dB	16 dB	16 dB
Noise Figure	50Ω	10 dB			
	75Ω	12 dB			
Output 1dB Compression		0 dBm			
OIP3		+10 dBm			
OIP2		+30 dBm			
3rd Order intermodulation level		-40 dBc		With 2 equi-magnitude -13 dBm carriers. Total power -10 dBm.	
Input RF Power		16 dBm (Absolute maximum)			
In Band Spurious		<-80 dBm			
COMBINER					
Input Return Loss	Typical	21 dB	21 dB	21 dB	21 dB
	Minimum	16 dB	16 dB	16 dB	16 dB
Output Return Loss	Typical	20 dB	20 dB	20 dB	20 dB
	Minimum	16 dB	16 dB	16 dB	16 dB
Noise Figure	50Ω	22 dB			
Output 1dB Compression		+10 dBm			
OIP3		+20 dBm			
OIP2		+30 dBm			
3rd Order intermodulation level		-40 dBc		With 2 equi-magnitude -13 dBm carriers. Total power -10 dBm.	
Input RF Power		16 dBm (Absolute maximum)			
In Band Spurious		< -80 dBm			

Environmental	
Operating Temperature	0 to 50˚C
Location	Indoor use only
Storage Temperature	-20˚C to +75˚C
Humidity	85% non-condensing
Altitude	10,000 feet AMSL (above mean sea level)

Power		
AC Consumption	<35 W	At steady state with max rated LNB current supplied
PSU Power	85-264Vac 50/60Hz.	Fused 2A
LNB Power	0/13V/18Vdc, 500mA max via common (RF in) port, over current protected at 800mA typical. 22kHz tone on/off enabled/disabled through comms. Monitored, alarms & status available through comms. Thresholds settable by user through comms.	Controlled by Ethernet, Splitter only
PSU Redundancy	Dual redundant with dual IEC inlets.	Diode OR. Not hot swap

System Control	
Display	Front panel Tri colour LEDs to indicate PSU, LNB Power supply & amplifier status on front panel.
Remote Control & Monitoring	Via RJ45 Ethernet port with 10baseT/100baseTX Ethernet offering web browser access, SNMP & ETL proprietary TCP protocol.
Alarms	Dry contact change over via 9-way D-type. Available alarms are: PSU and LNB supply. Full status & alarms are also available via the Ethernet interface.

Physical	
Weight	3.05 kg
Dimensions	1U high x 350mm deep x 19" wide
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.

Preliminary Specifications

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