ETL Systems
Excelling in RF Engineering

Model Number:
H0108D1UIA-22481-XXXX

Hybrid 8-way IF Active Single Dextra Series Splitter & Combiner with dual redundant amplifiers (OPT-R version), DC pass (OPT-D version), switchable LNB powering on splitter & -20 dB monitor port

Typical applications:
- Satellite operators, VSAT, teleports and broadcasters
- High resilience RF distribution where optimum satellite signal quality is required
- 20-1000 MHz to cover Ka-band and HTS applications

20– 1000 MHz operating frequency range. HTS ready.

LNB Current Monitoring allows customer settable alarm thresholds for LNB

LNB Powering 13/18V (on splitter)

Input signal monitoring with –20dB monitor port

Compact 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 amplifier & power supply status

Resilience from dual redundant power supplies and amplifiers (optional)

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Preliminary Specification

Technical specifications and operating parameters

RF Parameters					
Capacity		8-way Splitter and Combiner			
Connector & impedances		50Ω BNC	50Ω SMA	75Ω F-Type	75Ω BNC
Frequency Range		20-200 MHz			
	Gain	0±1.0 dB mean across band			
	Gain Flatness Full Band	±0.6 dB	±0.6 dB	±0.8 dB	±0.8 dB
	Gain Flatness Any 36MHz	±0.25 dB	±0.25 dB	±0.4 dB	±0.4 dB
Frequency Range		50-1000 MHz			
	Gain	0±1.2 dB mean across band			
	Gain flatness Full Band	±1.5 dB	±1.8 dB	±2.0 dB	±2.0 dB
	Gain flatness Any 36MHz	±0.3 dB	±0.35 dB	±0.5 dB	±0.5 dB
Group Delay Variation	Full Band	2 ns Maximum			
	Any 36MHz	1 ns Maximum			
Amplification		Single path amplifier			
Amplifier Redundancy (Option OPT-R)		Dual redundant, selectable hot or cold standby, 1:1 redundancy with auto switch-over based on amplifier current monitoring			
DC Pass (Option OPT-D)		DC pass port 1 to common port			
Amplifier Redundancy & DC Pass (Option OPT-RD)		Dual redundant amplifier and DC pass port 1			
Front Panel Monitor		50Ω SMA (-20dB, 16dB return loss typical)			
Isolation @ 70MHz (Minimum between any 2 multi-ports)	Typical	30dB			
	Minimum	20dB			
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 dB (Typical)	50Ω	15 dB			
	75Ω	16 dB			
Output 1dB Compression		0 dBm			
OIP3		+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	Typical	22 dB			
Output 1dB Compression		+10 dBm			
OIP3		+20 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

Physical	
Weight	3.05Kg
Dimensions	1U high x 350mm deep x 19" wide
Colour	RAL9003 - White (Semi-Matte)

System Control	
Display	Front panel Tri colour LED's for PSU, LNB Power & amplifier condition
Remote Control & Monitoring	Via RJ45 Ethernet port with 10baseT/100baseTX Ethernet offering web browser access, SNMP and ETL proprietary TCP protocol (Redundant amplifiers, LNB current and power supplies monitored)
Alarms	Dry contact change over via 9-way D-type. Alarm port on rear panel for PSU & LNB supply. Full status and alarms are also available via the Ethernet interface.

Power		
AC Consumption	<35 W	At steady state with max rated LNB current supplied
PSU Power	100-240Vac 50/60Hz . Fused 2A	Dual mains inlet
LNB Power (RX) - Splitter Only	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 and status available through comms. Thresholds settable by user through comms.	
PSU Redundancy	Dual redundant with dual IEC inlets	Not hot swap

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.

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