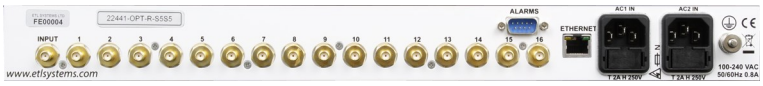
ETL Systems

Excelling in RF Engineering

Model Number: D0116S1UIA-22441-XXXX

10MHz Distribution Amplifier - 16 port

with dual redundant amplifiers (OPT-R), variable gain & Ethernet remote control & monitoring



The **Dextra series** 10MHz distribution amplifier has been designed for high resilience RF distribution, and optimum satellite signal quality. It benefits from excellent RF performance and compact form factor as well as advanced functionality.

Typical applications:

- To distribute a low noise 10MHz frequency reference for multiple applications such as LNBs, BUCs and spectrum analysers.

Benefits & features:

- Highly resilient solution minimising the risk of expensive downtime for the satcoms user
- Dual redundant power supplies
- Dual redundant amplifiers (option)

Advanced functionality:

- Dual redundant amplifiers (option)
- -20 dB monitor port on the front panel
- Web browser access (and SNMP) for control and monitoring
- Compact 1RU 19” chassis

RF performance:

- Optimised for 10MHz Reference Distribution
- Excellent Gain flatness (frequency response)
- High return loss
- High linearity
- Low noise figure

Options: Dextra units can be specified with single amplifier or hot/cold-standby dual-redundant amplifier options. Please specify OPT-R for redundant amplifier option. This is remote configurable.

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Technical specifications and operating parameters

RF Parameters					
Capacity		16 port			
Frequency Range		5-20 MHz			
Connectors and Impedances		50Ω BNC	50Ω SMA	75Ω F-Type	75Ω BNC
Gain		0-10 ±1.0 dB	0-10 ±1.0 dB	0-10 ±1.0 dB	0-10 ±1.0 dB
Gain Flatness	Full Band	±0.8 dB	±0.8 dB	±1.0 dB	±1.0 dB
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
Group Delay		7 ns maximum mean across band			
Amplification		Single path amplifier (standard model)			
Amplifier Option		Dual redundant amplifier Selectable hot or cold standby, 1:1 redundancy with auto switch-over based on amplifier current monitoring.			Option: OPT-R
Isolation		26 dB	26 dB	26 dB	26 dB
Noise Figure		10 dB minimum at maximum gain			
Output 1dB GCP		+4 dBm			
3rd Order intermodulation level		-40 dBc	With 2 equi-magnitude -13 dBm carriers. Total power - 10 dBm.		
In band spurious		< -80 dBm			
Input RF Power		16 dBm Absolute maximum			
Front panel monitor		50Ω SMA -20 dB, 16 dB return loss			

Physical		
Dimensions	1U high x 350mm deep x 19" wide	
Weight	3.05 kg	
Colour	White 00-E-55 semi-gloss	

Environmental		
Operating temperature	0 to 50˚C	
Location	Indoor use only	
Storage temperature	-20˚C to +75˚C	
Humidity	85% non-condensing	Relative Humidity
Altitude	10,000 feet AMSL	Above Mean Sea Level

Power		
AC Consumption	<20W	
Input RF Power	16 dBm	Absolute maximum
In Band Spurious	<-80 dBm	
PSU Power	85-264Vac 50/60Hz	Fused 2A
PSU Redundancy	Dual Redundant PSUs with dual IEC inlets.	
Hot-swap PSU	No	Diode OR

System Control	
Display	Front panel tri colour LEDs to indicate PSU and amplifier status.
Remote Control & Monitoring	Redundant amplifiers & power supplies monitored via RJ45 port with 10baseT/100baseTX Ethernet offering web browser access, SNMP and ETL proprietary TCP protocol
Alarms	Dry contact, change-over via 9-way D-type. Full status and alarms are also available via the Ethernet interface. Available alarms are PSU and summary.

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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