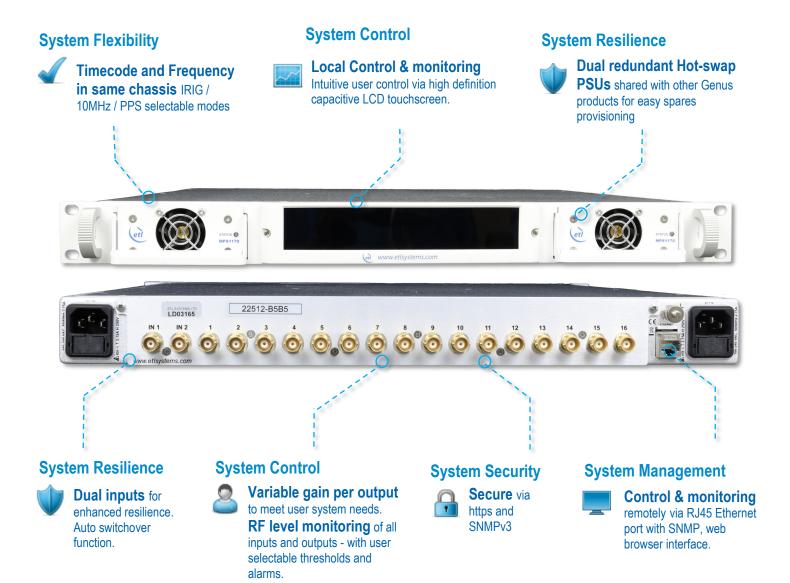


Dual input 16-way Time Frequency Distribution Amplifier / Splitter for

10 MHz, PPS and any IRIG time code. With RF signal detection & output gain control

Typical applications:

 Mission critical 10MHz reference signal and timecode distribution for communication systems, satellite earth stations, test facilities and engineering



















Model Number: D0216S1UIA-22512

Technical specifications and operating parameters

RF Parameters					
Capacity		16-way Splitter			
Number of inputs		2		Dual input 1 or 2 selectable or auto mode based on input signal presence	
Number of outputs		16			
Switchable modes		IRIG (IRIG AM & IRIG DC formats apply)			
		1PPS—1MPPS			
		10 MHz			
	perating l	Frequency			
Gain Adjustment Range (software selectable)	Low Gain Mode	-10 to 0 dE in 1 dB ste		Individually adjustable	
	High Gain Mode	-2 to +8 dE in 1 dB ste			
Return Loss	Typical	20 dB			
Neturi Loss	Minimum	16 dB			
Amplifier Redundancy		Dual redundant amplifier input stage amplifiers only. Hot or cold standby, 1+1 redundancy with auto switchover based on amplifier current monitoring.			
Isolation		>85 dB		Between any RF ports	
Min/Max Operating Input /output Level		+15 dBm (1V _{rms})			
Additive SSB Phase Noise		1 Hz 10 Hz 100 Hz 1 kHz 10 kHz+ 100 kHz	-125 dBc -135 dBc -135 dBc -145 dBc -155 dBc -160 dBc	At +15 dBm Output @ unity gain	
Spurious Signals		<-80 dBc			
Harmonics		<-40 dBc			
RF Detection Limits		-10dBm to +16dBm ±1.5dB			
Power					

	Power	
AC Power	100-240Vac 50/60 Hz	Dual IEC INLET C14 Fused (L+N) 2A Used T2A, 250V Ceramic 5x20mm
AC Consumption	<50W	At steady state
PSU	Dual redundant & alarmed	Diode OR. Hot swap

Physical		
Input & output ports	50Ω BNC, 50Ω SMA	
Dimensions	1U high x 600mm deep x 19" wide	
Weight	<10 Kg	
Colour	RAL9003-White (semi-matte)	

Pulse/DC IRIG			
Frequency	1PPS to 1MPPS		
Input Level	0-6V pp	Low detection threshold 200mV or less	
Output Level	5V peak nominal	High: >4.5V. Low: <0.5V	
Detection voltage threshold	0.2V to 4.0V user settable in 0.1V steps		
Duty Cycle	0% to 100%	Output signal presence detection valid for duty cycles 1% and above.	
Rise Time	<20ns	(Measured between low and high thresholds)	
Fall time	<20ns		
Jitter	<200ps RMS		
Skew	<±3ns (output to output)		
	AM IRIG Time Code		

AM IRIG Time Code		
Modulation Frequency	Up to 1MHz	
Level	0-6V pp	
Gain	Unity Gain	
Code format	Any IRIG format	

System Control			
Local Control & Monitoring	LCD capacitive touchscreen via front panel		
Remote Control & Monitoring	RJ45 port with 10baseT/100baseTX, ETL TCP/IP Protocol. SNMP. Built in web server.		
Monitoring Functions	Input and Outputs signal presence. Amplifier. PSUs	Controlled by Ethernet	
Alarms	PSU, amplifiers and signal status. Full status & alarms also available via the Ethernet interface or front HMI		
Security	HTTPS & SNMPv3		

Environmental			
Operating Temperature	0 to 45°C		
Location	Indoor use only		
Storage Temperature	-20°C to +75°C		
Humidity	20 to 90% non-condensing	Relative humidity	
Altitude (operational)	2,000m AMSL (above mean sea level)		
Altitude (storage)	8,000m AMSL (above mean sea level)		
MTTR	20 mins. 15 mins to retrieve spare and 5 mins to replace.		
MTBF	Chassis & CPU >250,000 hrs. Module >110,000 hrs		

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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