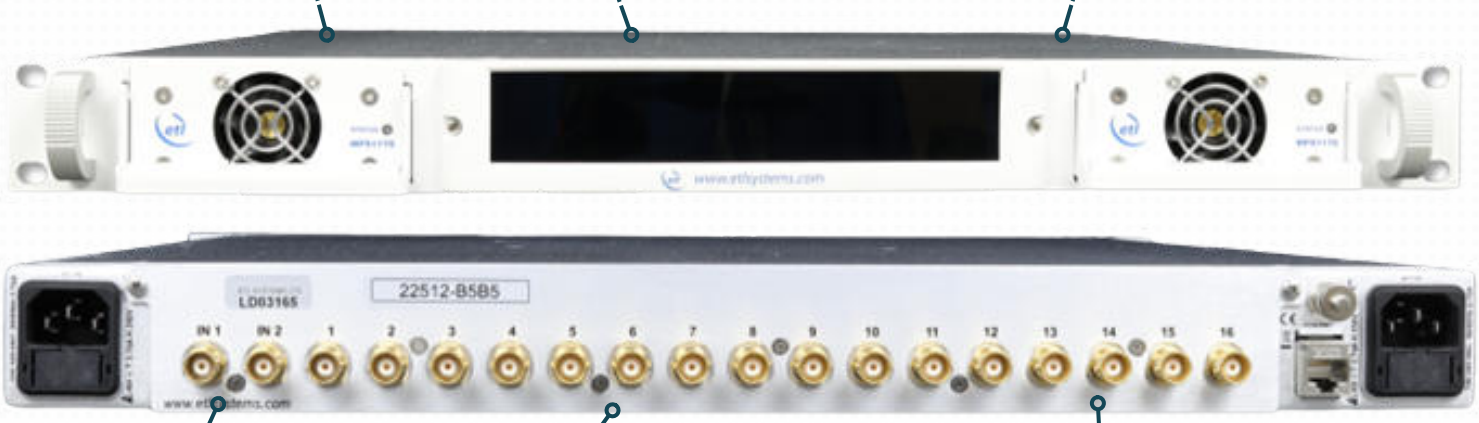
Dual input 16-way Time Frequency Distribution Amplifier / Splitter

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

Timecode and Frequency in same chassis
IRIG / 10MHz / PPS selectable modes

Local Control & monitoring
Intuitive user control via high definition capacitive LCD touchscreen.

Dual redundant Hot-swap PSUs
shared with other Genus products for easy spares provisioning



Dual input
for enhanced resilience. Auto switchover function.

Variable gain per output
to meet user system needs. RF level monitoring of all inputs and outputs - with user selectable thresholds and alarms.

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

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	
10 MHz Operating Frequency			
Gain Adjustment Range (software selectable)	Low Gain Mode	-10 to 0 dB in 1 dB steps	Individually adjustable per output
	High Gain Mode	High Gain Mode -2 to +8 dB in 1 dB steps	
Return Loss	Typical	20dB	
	Minimum	16dB	
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	At +15 dBm Output @ unity gain	1 Hz 10 Hz 100 Hz 1 kHz 10 kHz+ 100 kHz	-125 dBc -135 dBc -135 dBc -145 dBc -155 dBc -160 dBc
Spurious Signals		< -80 dBc	
Harmonics		< -40 dBc	
RF Detection Limits		10dBm to +16dBm ±1.5dB	
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)	

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.

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
Power	
PSU	Dual redundant & alarmed Diode OR. Hot swap
AC Consumption	<50W at steady state
AC Power	100-240Vac 50/60 Hz Dual IEC INLET C14 Fused (L+N) 2A Used T2A, 250V Ceramic 5x20mm
Physical & Environmental	
Input & output ports	50Ω BNC, 50Ω SMA
Dimensions	1U high x 600mm deep x 19" wide
Weight/Colour	<10 Kg RAL9003 White (semi-matte)
Temperature	Operating: 0 to 45˚C / Storage: -20˚C to +75˚C
Location/Humidity	Indoor use only — 20 to 90% non-condensing
Altitude	Operational = 2,000m AMSL (above mean sea level) 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

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