Dual Input 16-way Time Frequency Distribution Amplifier / Splitter

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

Timecode & Frequency in same chassis

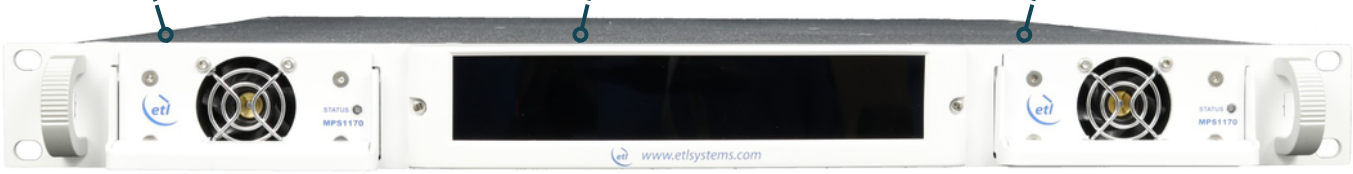
IRIG / 10MHz / PPS selectable modes

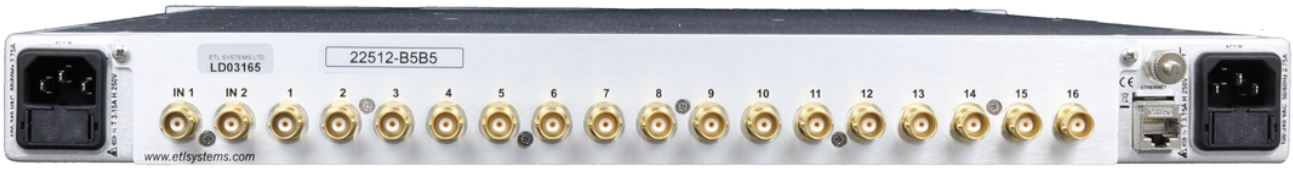
Local Control & monitoring

Intuitive user control via high definition capacitive LCD touchscreen.

Dual redundant Hot-swap PSUs

shared with other Genus products for easy spares provisioning





Dual inputs

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.

Control & monitoring

remotely via RJ45 Ethernet port with SNMP, web browser interface.

Secure

via https and SNMPv3

RF Specifications		
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 High Gain Mode: -2 to +8 dB in 1 dB steps (Individually adjustable per output)	
Return Loss	Typical	20 dB
	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 (1Vrms)	
Additive SSB Phase Noise At +15 dBm Output @ unity gain	1 Hz -125 dBc 10 Hz -135 dBc 100 Hz -135 dBc 1 kHz -145 dBc 10 kHz+ -155 dBc 100 kHz -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)	
AM IRIG Time Code		
Modulation Frequency	Up to 1MHz	
Level	0-6V pp	
Gain	Unity Gain	
Code format	Any IRIG format	

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

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 & Physical	
Temperature	Operating temp: 0 to 45˚C Storage temp: -20˚C to +75˚C
Location	Indoor use only
Humidity	20 –90% non-condensing (Relative humidity)
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
Input & output ports	50Ω BNC, 50Ω SMA
Dimensions	1U high x 600mm deep x 19” wide
Weight	<10 Kg
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.

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