

GPS10RBN-16 BCD Time Output Extender



Key Features

- BCD Time Code output with resolution to 100 ns. BCD time code updated every 100 ns
- BCD output accurate to UTC world time to typically ± 200 ns (when used with the GPS10RB)
- BCD output can drive 50 Ω cables
- BCD Output and Complementary output available on two 50 way D connectors
- 2U Rack mount case with LCD readout
- RS232 interface
- Operates in conjunction with GPS10RBN frequency standard.
- High quality design
- Low price
- Can be adapted to specific customers requirements

General Description

The GPS10RB-16 Time Code Extender operates in conjunction with a GPS10RBN: GPS Frequency Standard. It generates a 13 digit, 48 bit, BCD Time Code Output with 100 ns frequency resolution and typically 150 ns accuracy to the 1 pps input.

The BCD time code output is synchronized to the rising edge of the 1 pps external input signal. The BCD output is updated every 100 ns and accuracy is typically 150 ns to the rising edge of the external 1 pps input.

The BCD format is HH:MM:SS.SSSSSS, where H = hours, M = minutes and S = seconds and fractional seconds. The output is available on two 50 way "D" connectors.

One 10 MHz input and one 1 pps signal are derived from the GPS10RBN to synchronize the time code.

Specifications		
Description	Specification	Remarks
BCD Time Code Output		
Connectors	50 way D connector female socket	Two connectors
Output Level	AM26LS31 compatible	ANSI TIA/EIA-422-B
Code type	Binary Coded Decimal (BCD)	
Format	HH:MM:SS.SSSSSS	H = hours, M = minutes, S = Sec
Resolution and update rate	100 ns and 100 ns	
Accuracy to 1 pps input	< ± 150 ns typical	Rising edge of 1 pps input used
1 pps Input		
Frequency	1 pulse per second	1 pps output also available
Minimum pulse width	10 µs	
Input Level	TTL	
Edge used for synchronization	Rising edge	
10 MHz Inputs		
Frequency	10 MHz sinewave or squarewave	
Input level	+8 dBm to +13 dBm	
RS232 Interface		
Settings	9600 baud, 1 stop bit, no parity	Use Special RS232 cables only
Miscellaneous		
Ambient Temperature	0 °C to +40 °C	
AC Power Inlet with switch	IEC320 power cord	Rear Panel
AC Voltage Range	100 - 240 VAC @ 40 - 60 Hz	Auto switching
Power consumption	66 watts	
Dimensions (W x D x H) and weight	482.6 x 348 mm x 88 mm and 7 kg	
Accessories Supplied		
Power Cord	IEC320 type	
RS232 Interconnection Cables	“D” Connectors	Two supplied for GPS10RBN & PC
BNC Cables	2 x 300 mm BNC to BNC cables	Connect to GPS10RBN
Instruction manual		
All other options		
Consult Precision Test Systems for further details of other options. Not all options can be fitted at the same time.		

Head Office - UK	USA
Precision Test Systems LTD Unit 4B Grange Farm Abbots Ripton, Huntingdon Cambridgeshire, PE28 2PH, UK Tel: +44 (0) 333 444 9608 Email: uksales@ptsyst.com Web: www.ptsyst.com	Precision Test Systems L.L.C 304 S. Jones Blvd Suite #807 Las Vegas, NV, 89107 Tel: 1 888 876 4804 Email: usasales@ptsyst.com Web: www.ptsyst.com

Full specifications available from www.ptsyst.com. Specifications and features subject to change without notice (101221)