

PCM Decommutator

Model No: JC-SMTP-PCD11



Land



Air



Marine

De-commutation (Decom) system is a PC based data acquisition system with PCM Frame Synchronizer supported by Telemetry application & data processing software. It receives Clock & Data signals from the Bit-Synchronizer. It acquires, processes, Time tags the data, Displays the parameters as per the user requirements and logs the data locally.

Applications

- Telemetry Reception System
- Range or Satellite application

Features

- Dual channel Decommutation with per channel rate upto 5 Mbps
- Data Transfer through ethernet in real time
- Programmable Frame Length, Word size and Frame Sync Code
- Frame Sync error tolerance
- Inbuilt test simulator
- IRIG time stamping



Technical Specifications

Functional	
DECOMMUTATOR	
Output Format	Compliant with IRIG-106 Class A
Inputs	a) Two channels of Data & Clock b) IRIG-B Time
Input Levels	Single-ended TTL & RS-422 levels
Data polarity	Auto, Normal, Inverse (Programmable)
Clock Phase	0°, 180° selectable
Input data rate	100 bps - 5 Mbps
Time input	a) IRIG-B 1KHz Modulated Signal. b) External GPS interface. c) Any other time source over Ethernet Interface.
Bit Order	MSB or LSB first (selectable)
Sync Error Tolerance	0-15 bits (selectable)
Bit Slip Window	1 or 3 bits wide (selectable)
Sync Polarity	Normal, inverted, automatic detection (selectable)
Sub-Frame Sync	FCC, SFID
SFID Location	Anywhere in the frame (programmable)
Time Tagging Resolution	1 ms
Communication Interface	10/100 Base-T for Data Transmission to Laptop & Configuration from Tab.
Application Software	Configuration, Format entry, real-time processing, EU conversion, display, logging and transmission to remote location (UDP) and post processing
Signal I/O connections	Data, Clock and IRIG time -Circular connector Ethernet - RJ45, GPS interface - 15 Pin DB
Simulator	
No. of Channels	2 Data & 2 Clock output Signals
Data Rate	5 Mbps Maximum
Output Levels	TTL & RS-422
Data Format	As per IRIG 106
Format Content	User Defined from GUI
User Interface	
Display	4X20 OLED
Keypad	5X5 Membrane Type
Electrical	
Power Supply	230V±15V AC, 1 Phase, 50 Hz or 24V±4V DC
Mechanical	
Dimensions	2U-19-inch rack mount with 350 mm depth
Weight in Kg	< 5 kg
Environmental	
Temperature	
Operating	-20° C to +55° C
Storage	-25° C to +65° C
Humidity	90% RH Non Condensing
Environmental Compliance	JSS-55555 / MIL 810D
EMI/EMC Compliance	MIL-STD-461E

