

## PTU3 Portable 2 Channel

The JDA Systems PTU3 portable 2 channel telemetry system contains an optional dual channel All Band direct conversion Receiver, dual channel bit sync, decom, encoder/generator, data processor and router with full VuSoft software installed to offer IRIG 106 Chapter 4, Chapter 8, Chapter 9 and Chapter 10 support in a small portable form factor with a panel touch screen monitor and a removeable keyboard/mouse.

The rugged composite chassis contains everything needed to receive, recover and process dual PCM signals directly from antennas, external receivers, encoders or recorder replay. It has a built-in monitor, keyboard and touch pad. The two inbuilt high performance bit synchronizers and decoders operate independently to allow for the processing of two data streams whether they come from the same source or are completely independent. The PTU3 has been specifically designed for low power consumption and low heat dissipation which make it ideal for remote or on difficult applications.

As the PTU3 is fitted with a full suite of computer interfaces so it is possible to connect an external mouse, keyboard and display directly to the unit, or of course to fully remote control the unit over the built in gigabit Ethernet interface.

A built-in solid-state disks is included, contains the operating systems and the user data, external data storage devices are also supported.

The PTU3 can act optionally as a data server and an IRIG106 Chapter 10 recorder and replay device with it standard suite of VuSoft software and can serve Chapter 10 broadcast data or TMOIP over the built in gigabit Ethernet interface.



PTU3 Portable 2 Channel

For more information, please contact your local agent or contact JDA Systems directly:

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## PTU3 Portable 2 Channel Features

- Optional All band RF TIER0, TIER1 and optional TIER2 reception
- Supports the IRIG Standards Including Chapters 4, 7, 8, 9 & 10
- Full Telemetry Ground Station Functionality From Receiver to Post Processing
- Dual Independent Bit Sync & Decom Channels For High Speed Operation
- Real Time and Playback Data Regeneration and Network Broadcast Capability
- Low Power Operation with Low Heat Generation
- Fitted With a Professional Grade Intel Processor
- Customizable To Support Customer Unique Applications

### Receiver Characteristics (Optional)

Frequency Range	70MHz to 6GHz Direct Conversion
Types	TIER0 & TIER1 with optional TIER2
Bit Rate	100 bps to 20 Mbps
Input Code Types	NRZ-L/M/S, BIO-L/M/S, RNRZ/RNRZR-9/11/15/17/23
Channels	Dual Channel One Frequency

### Bit Sync Characteristics

Data Polarity	Normal or Inverted
Input Bit Rate	100 bps to 40 Mbps
Input Code Types	NRZ-L/M/S, BIO-L/M/S, RNRZ/RNRZR-9/11/15/17/23
Output Code Type	NRZ-L BNC & Internal
Loop Bandwidth	Digital Fully Automatic
Acquisition Range	Digital Fully Automatic
Tracking Range	Digital Fully Automatic
Bit Error Probability	Within 1db to Theoretical
Loop Bandwidth	Automatic Full Digital
Tracking Range	Automatic Full Digital
Clock Format	0 Degree and 180 Degree

### PCM Data Characteristics

IRIG 106 Types:	Chapter 4 (Optionally Chapter 7, Chapter 8, Chapter 10)
Bit Rate:	100 bps to 32 Mbps Per Channel (80 Mbps combined)
Serial Input	RS422 (differential) & TTL(0-5V)
Serial Output	RS422 (differential) & TTL(0-5V)
Time Sources	IRIG A and B
Time Resolution	Internal 100 nSec
Time Accuracy	Better than 1 uSec
Frame & SubFrame	Word/Frame >8912, Frame/Format >1024

### Power Requirements

Input Voltage:	96 to 260 VAC 50 or 60 Hz
Nominal Power:	180W

### Mechanical

Material:	Composite Plastics
Dimensions:	350 x 295 x 150 mm (WxHxD)
Weight:	Approx. 7 kg
Data Connectors:	SMA, BNC & Differential BNC

### Environmental

Temperature (Operating):	-20°C to +60°C
Acceleration:	100 g, 3 Axes
Altitude:	30,000 m
Humidity:	Up to 100% Non Condensing

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