

Orbital Network Engineering



2400 series Telemetry System Host

Key Features

- Supports 18 full length PCI Cards
- Redundant –hot swappable Power 4X 250W
- Integrated Digital Data Recorder
 - RAID 0 & 1 (stripes and mirroring) supported
 - Hot Swappable Disks
- SATA II Disk subsystem
- 2 Tera Byte (2,000GB) Capacity
- Record & Playback
- Supports Dynamic Hardware reconfiguration
 - Reload FPGA firmware without shutdown
 - Change system type automatically
- Real Time Linux
- Java Based GUI
- Dual 10/100/1000 network support
- Integrated 88 key- keyboard w/ touchpad
- 800x600 TFT Display

Capabilities

The ONEuP 2400 series is a fully self-contained and network enabled telemetry system. The system provides signal processing from RF to baseband / network. It employs highly integrated multi-band receivers, digital pre-detect diversity combiners, digital best source selectors, multi-mode demodulators, high performance bit synchronizers, frame synchronizers and PCM decom processing. The system also provides IRIG-B time-stamping and data frame decommutation. System configuration and operation is accomplished using XML based tables which are accessed and edited through a Java based GUI in a common web browser. Integrated PCM stream simulators are available with the ability to play back recorded data or to generate a data stream. For ease of configuration, configuration data may be imported from external tools such as Microsoft Excel. The system also permits the importing of configuration data from databases that support the PCM encoder systems being used to encode the telemetry stream.

The system supports multiple decom cards providing multi-channel operation. The system also provides digital data archiving and supports data publish/subscribe on a LAN/WAN. Data display and monitoring is supported through the browser based ONE Quick Look software suite. This software provides users with access to raw and EU converted data through Java based displays accessed through a common web browser.

System control is performed through a java enabled web browser, direct access using XML or through our Active-X component. Local access to the system uses the integrated 800x600 TFT color display and keyboard/touch-pad. The 2400 may also support legacy command and control via optional RS232/422 or GPIB interfaces. When required the system is easily and securely updated via a simple USB flash drive.



ONE 2400 Series Telemetry System Host

System Host Specifications

CPU	2.8 GHz Intel Celeron minimum, 533MHz frontside bus
Memory	Minimum of 2GB RAM, Minimum of 2 GB Flash Disk
Display	8.4" TFT LCD, 800 X 600 w//touchscreen
Keyboard	Integral 88-key with touchpad in drawer
Network	10/100/1000 Mbps, 2 LANs supported
Services	USB support behind front door
Time Services	NTP, SNTP client & server IRIG-B timecode receiver Optional GPS receiver
Dimensions (W x H x D)	19" x 6.8" x 26"
Cooling	Four 90 mm x 90 mm high CFM fans Five 20mm X 20mm exhaust fans
Operating Temperature	0° C to +40° C
Storage Temperature	-40° C to +60° C
Relative Humidity	10-95%
Vibration	5 Hz to 500 Hz, 1 g rms operating, 2 g rms non-operating
Shock (operating)	30 g with 11 msec duration, ½ sine wave
Acoustic Noise	Less than 52 dBA sound pressure at +5° C to +28° C (+41° F to + 82° F)
Altitude	0 to 3048 m (0 to 10,000 ft)
Safety	UL, cUL, CE, FCC & CCC

Recording Subsystem Specifications

Parameter	Specification
Format	Various formats available including IRIG 106 ch 10 compatible
Media	SATA II 350,500,750, 1,000,1500,2000GB
Bandwidth	120 MBps
Disk Formats	RAID 0 & 1
Playback	through TCP/IP socket
Stream Capacity	16
File transfer	ftp or usb flash drive transfer
File storage	Circular w/ auto management

Ordering Information

ONE 2400 series Systems are available in single and multi channel systems.

Custom user defined I/O panels are available.

Contact ONE for configuration options, price and availability.

ONE supports continuous improvement so our specifications are subject to change without notice.