KINEMETRICS

SLATE

Rugged, Ultra-Low Power Field Processor

Slate is a rugged, ultra-low power, multi-purpose processor designed for wide variety of field deployments in extreme operating conditions.

As a member of Kinemetrics' new ***Rock*** product line, ***Slate*** represents a paradigm shift in ultra low power field computing. ***Slate*** is designed to allow building embedded applications to meet mission critical needs in field harsh environments. ***Slate*** offers extensive field processing capabilities, coupled with flexible communication options, and giving you an advanced platform for all your challenging projects.

Slate is available either as a user-programmable system with embedded Linux, ***Clean-Slate***, or pre-loaded with Kinemetrics', ***Rock Hound*** software, to support seismic monitoring applications.

The ***SLATE*** design deliberately avoids the use of internal batteries. Based on past experience such as leaking batteries, difficulty in changing batteries and managing the battery lifetime, a novel design is utilized. The unit contains an internal short-term UPS based on super capacitor technology that ensures proper Linux shut down.

Features

- Typical power consumption between 0.4W (idle) and 0.9W (with two Ethernet ports connected)
- MontaVista HardHat Linux v2.4.20
- Robust Journaling File System
- Optional Development Environment with Apache web server, Python, C++ compiler and JVM
- Up to 32GBytes Solid State Storage
- Dynamic Power Management
- Advanced Power Control with intelligent safe and secure system shutdown and auto start
- Extensive State-of-Health Monitoring, including input and system voltages, internal temperature, internal humidity, communication link diagnostics
- System Status LEDs
- Transient and EMI/RFI protection on all connections
- Rugged aluminum extrusion with MIL-SPEC type connectors designed for 1m drop and 1m temporary immersion (IP67)
- Environmentally sound lead-free design; RoHS, WEEG and CE compliant

Specifications

Processor:	400 MHz Intel PXA255 XScale®
Memory:	256 -MBytes SDRAM
Storage:	1 x Internal Compact Flash Slot (up to 64 Gb) 1 x SD Card 4 GB 1 x SD Card Field Removable (optional)
Interfaces:	2 x 10BaseT Ethernet Ports 2 x RS232 Serial Ports 1 x USB 1.1Port (1 OTG/1 Host) (optional)
Power:	8-18 VDC 0.6W (typical)
Environmental:	-20 +60°C Operation (optional -30 +70°C) 0-100% RH (non-condensing)
Additional Options:	Available advanced power and communication enclosure with optional AC power, Solar Power Controller, and internal battery. Optional communications include internal GSM/GPRS Modem or CDMA Modem Available hardened Ethernet Switch with Power over Ethernet IDE Drive with USB 1.1 Interface for off line data removal, "Data Vacuuming".

All specifications subject to change without notice

USA – 222 Vista Ave., Pasadena, CA 91107 / Tel (626) 795-2220 / Fax (626) 795-0868
Switzerland – Z.I. Le Trési 6B, 1028 Préverenges / Tel +41 (21) 803-2829
Visit us on the web at http://www.kinemetrics.com

TÜV ISO 9001