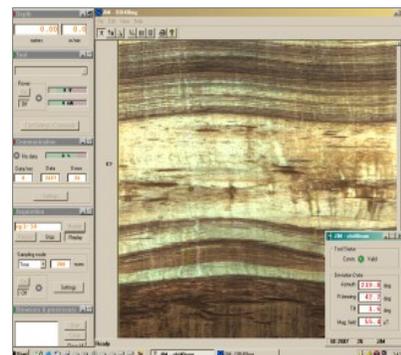# Matrix Data Acquisition System

The MATRIX provides a single solution to the multiplication of telemetry standards seen in the logging tool industry over the last decade.

The MATRIX offers a unique combination of versatility, ruggedness and ease of use. It can be easily transported, set up and run by a single operator. Since its introduction in 2006, the system has become the standard solution for a diverse range of applications meeting the requirements of the Mineral Exploration, Groundwater and Geotech industry.

- Uses latest Digital Signal Processor (DSP) technology directly linked to the wireline through a pair of ultra fast high-resolution A/D and D/A converters.

- Supports all ALT & Mount Sopris tools, most analog tools and a wide range of 3rd party tools.

- Telemetry automatically adjusts for operation on most common wireline lengths and configurations.

- Settings totally software controlled (incl. depth encoder and wireline tension).

- Real time data display and printing using LoggerSuite software. Windows printer support, WellCad compatible output format, converter to LAS format. Support of WellCad real-time browser.

- Support of sophisticated software tools such as digital scope, spectrum analysis and histograms for signal tuning. Access to configuration database.

- Lightweight portable, but extremely roust and adaptable.

Terraplus Inc.
120 West Beaver Creek Rd, Unit #15
Richmond Hill, ON, Canada, L4B 1L2

terraplus.ca
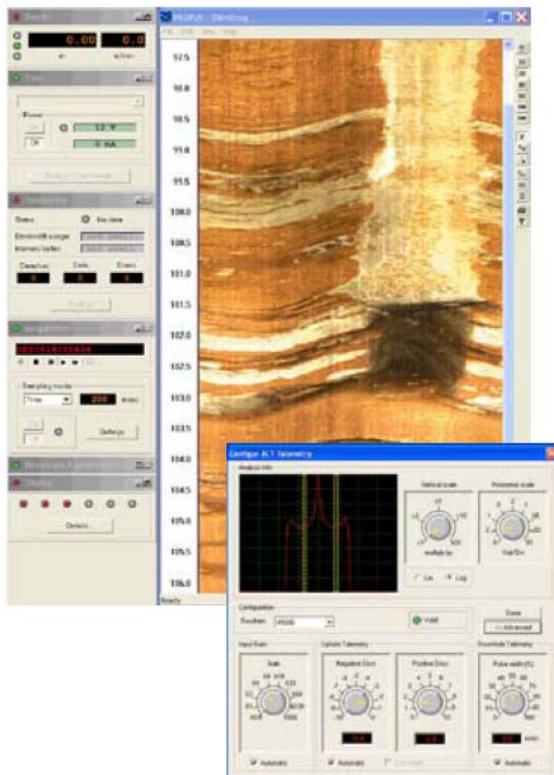1.905.764.5505
sales@terraplus.ca

The heart of the graphical user interface is the dashboard, the operators control panel to select and control all systems functions, monitor the data acquisition process and observe the logging tool status. The Dashboard consists of multiple threads running concurrently handling specific systems tasks simultaneously. The Dashboard provides access to the following windows:

- Depth control
- Tool configuration, power control and advanced tool settings
- Telemetry control and tuning
- Data sampling and replay control
- System status display
- Wireline weight indicator display
- Data browser and processor windows control

Browser windows are used for real time data monitoring and offer a wide choice of on-line display and printing options for conventional curves, full wave form sonic traces, acoustical and optical borehole images. A WYSIWYG header editor is available to provide sophisticated log headers with graphics. Special processors for acoustic velocity picking, spectral gamma display, stacking, and application of complex algorithms for real time compensated density are included with the matrix software package.

Using the WellCAD Browser add-on-module allows a real-time connection to the WellCAD data processing platform enabling the user to apply templates, compare currently logged data with reference/repeat data or run processes. QA / QC tasks, data preprocessing and field interpretation can be executed on incoming data.

Technical Specifications

- Dimension (W x L x H): 20 x 33 x 10 cm
  8 x 13 x 4 in
- Weight: 5 kg
- Input Voltage: 90 – 240 VAC, 50 – 60 Hz, Inventer compatible
- Tool Power: Up to 200 V / 300 mA
- Cable Connectors: 18 Pin Mil-C-26482 (single connector for depth, tension and wireline)
- PC Connection: High speed USB
- Operating System: Windows 8, Windows 7, Windows XP or Windows Vista operating systems platform running in 32-bit or 64-bit drivers.
- Logging Cable: Standard single, four, seven conductor and coax
- Logging Speed: e.g. ABI 40 @ 3mm, 144 pts/trn : 2.5 m/min
- Tools / Telemetry: ALT, MSI, Geovista, Robertson V106, Century, analog tools (up to 4 pulse channels)
- Upgradeability: User upgradable firmware
- Software: LoggerSuite Software