CAS DATALOGGERS

Versatile Data Logger Captures Data for Solar Monitoring

Log it All with dataTaker!

Whether startups or large manufacturers, companies have come to rely on data logging for system validation and proof of scale for prototype devices. dataTaker Universal data loggers can record almost any measurement value, making them ideal for performance monitoring and device component monitoring. These versatile loggers accept connection from many different sensor types. Whether you need to record electrical, environmental, weather data or solar monitoring dataTaker will log it all!

Recording Data for Proof Scale

Last year CAS DataLoggers provided the device and solar monitoring solution for Sulas Industries, a solar energy startup that has patented an innovative passive solar tracking device that works without using any motors, gears or electronics. Sulas is using a dataTaker DT85 Universal Data Logger which has since been installed, configured and connected to a wide range of sensors.

Sulas Industries Founder Fin Doyle explains: "When you're planning a new process, you know you need to gather enough data–all the information benefits your company in a multitude of ways. We're using the dataTaker for our multi-value data collection and process validation."

The Sulas team is using three thermocouple temperature sensors measuring ambient air temperature and internal temperature, with another three sensors monitoring the hydraulic cylinder pressure in the device. Meanwhile a pyranometer measures solar radiation while an anemometer measures wind speed and direction. Additional tilt sensors track solar panel angle to the sun.

The dataTaker logger features a maximum of 48 universal analog sensor channels, recording the analog signals from all these sensors and automatically scaling the data into engineering units. The Sulas team has also configured their dataTaker to generate and send out a nightly report containing the last 24 hours of recorded data.

The dataTaker DT85 serves this application as a single device to record and monitor all the required device parameters, weather and environmental values. Fin Doyle explains: "The dataTaker plays a key role in our validation process, collecting information on our solar process and giving us hard data for our proof of scale. The DT85's data is also a sales tool for us to show to customers."

DT80 Universal Intelligent Input Data Logger

The dataTaker DT80 is an intelligent data logger providing an extensive array of features that allow it to be used across a wide variety of applications.

Features:

- 5 to 15 Universal Analog Sensor Channels
- Expandable up to 300 Analog Inputs
- 8 Bi-Directional Digital Channels
- 4 High Speed Counter Channels
- 4 SDI-12 Channels
- Advanced Alarming & Mathematical Capabilities
- Ethernet, USB, or RS-232 Communication with PC
- SDI-12 and Modbus Sensor Support
- Built-in Web Server, FTP, and an Enhanced Web Interface

DT85 Universal Intelligent Input Data Logger

The dataTaker DT85 has all the features of the DT80 but adds:

- 16 to 48 Universal Analog Sensor Channels
- Expandable up to 900 Analog Inputs

Performance Monitoring Systems

For additional protection, the dataTaker also boasts a ruggedized design that can stand up to extreme temperatures and rough handling in any industrial environment. Meanwhile the 10 million-point internal memory stores the high data volume.

For remote data access, users can set the dataTaker to automatically transmit its readings to selected emails over your company network via FTP (File Transfer Protocol).

Software Generates Mimics and Reports

The dataTaker's built-in graphical interface dEX software allows for quick logger setup and configuration. Users can directly view data remotely online in real-time from a web browser. Using automatically-uploaded data files, users can create customized tables, charts, and graphs illustrating the collected environmental data.

Regarding the software, Fin Doyle comments, "We've been working with the software for a while now. We're fans of the dEX interface: it's easy to set up a sensor and a logging schedule. We view the data in dashboard mimic form so it's all there at a glance."

At CAS DataLoggers we can also incorporate dataTaker loggers into custom Modbus systems, enclosures with Maple displays, and more.

For more information on dataTaker Universal Data Loggers, solar monitoring or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or www.DataLoggerInc.com.