Road Weather

Measurement & Control Systems

System Benefits

Customer-owned data; you can modify and redistribute data without additional costs

Maximum flexibility; choose the sensors and telemetry that meet your exact needs

NTCIP compliant

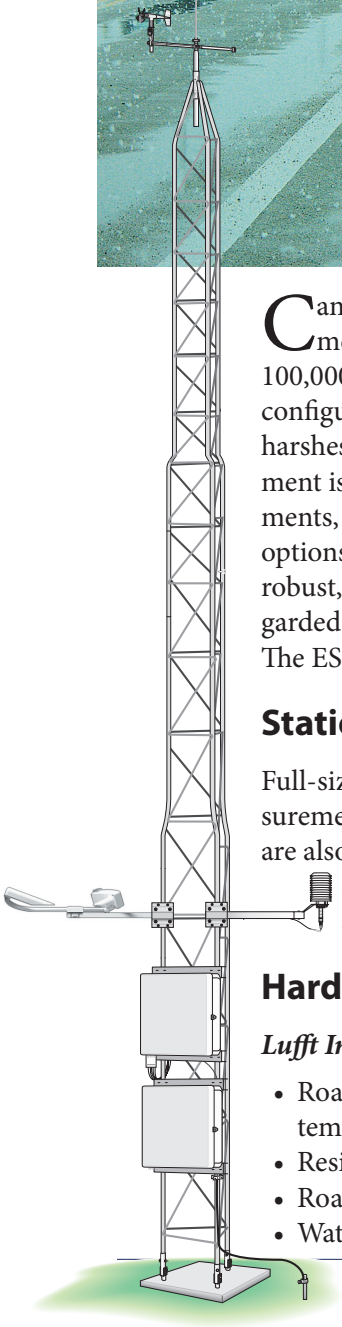
Web-based software provides management of data collection and display of data and alarm notification

Nonproprietary/open architecture

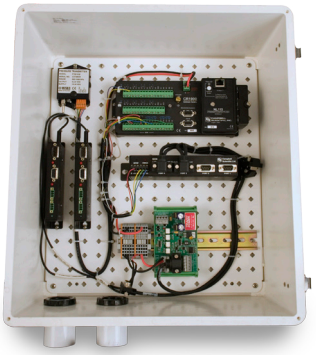
Low cost

Proven reliability in harsh weather conditions

Low power consumption allows remote operation without AC power



Campbell Scientific has designed and manufactured environmental monitoring and control systems since 1974. Over 100,000 systems have been fielded, most of which have been configured as weather stations. Many of these are deployed in the harshest of settings, located literally from pole to pole. Our equipment is known for flexibility, dependability in hostile environments, precision measurements, and remote telecommunication options. Campbell's Environmental Sensor Stations (ESSs) are robust, reliable weather stations that capitalize on our highly regarded electronic design experience and manufacturing expertise. The ESS is fully NTCIP compliant.



ESS Remote Processing Unit (RPU) with battery-backed power supply and phone modem.

Station Types

Full-sized ESSs are fixed on a tower of any size. If temporary measurements are needed, tripod-mounted systems are available that are also compliant. These might be for winter locations or problem spots that do not need a permanent tower. Measurements are chosen by the customer for each site.

Hardware

Lufft Intelligent Road Sensor

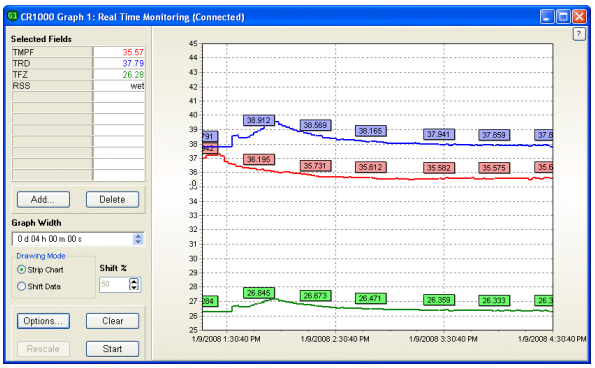
- Road temperature (with up to two aditional subsurface temperature measurements, optional)
- Residual salt content and calculation of freezing temperature
- Road surface condition—dry, moist, wet, ice, snow
- Water film level

Intelligent Road

Software

LoggerNet Datalogger (RPU) Support Software

LoggerNet is a full-featured software package based on a server application and several client applications. LoggerNet's open architecture allows a customer to directly modify RPU application programs or to develop new custom instruction sets entirely under customer control. LoggerNet collects and archives NTCIP data and camera images on demand or by schedule (including diagnostic information about the ESS hardware and software) at the ESS or remotely via a number of telemetry options. Telemetry options include phone, radio, Ethernet, and cellphone. All collected data may be exported to second-party analysis packages. Retrieved data is owned by the customer and may be redistributed to other users with no obligation to CSI.



LoggerNet Software provides programming, data retrieval, and graphing capabilities.

RWIS Administrator

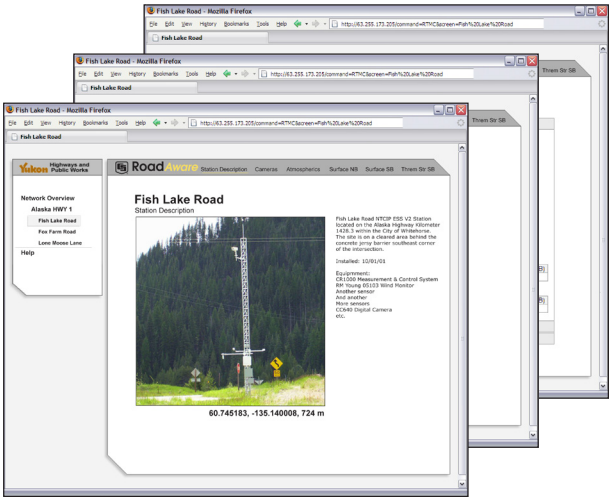
RWIS Administrator is used to interrogate all NTCIP-compliant stations. It is compatible with NTCIP versions 1 and 2. If an ESS is compliant, the RWIS Administrator will poll for and accept the data from that station.

RTMCPro Real-Time Monitor and Control Software

RTMCPro is used to create custom displays of real-time data and camera images. It provides digital, tabular, and graphical data display objects, as well as alarms. A customer can combine data from multiple ESS/RPUs on one display. Complex displays can be organized on multiple tabbed windows.

RTMC Web Server

RTMC Web Server converts real-time data displays into HTML files, allowing the displays to be shared via an Internet browser.



RTMCPro provides online access to road-weather data.

www.campbellsci.com/road-weather

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