# FlexDAQ Data Loggers

## Description

Ideal for remote monitoring in both common and demanding geotechnical conditions, RST FlexDAQ Data Loggers offer precise measurement and reliable data acquisition from various sensor types and gauges including vibrating wire, thermistor, MEMS (analog and digital), Tensmeg, linear potentiometer, strain gauge, LVDT, TDR, etc.

The 4 main FlexDAQ models are the CR6, CR300, CR800, and CR1000X. All offer extreme flexibility in their design configurations and are custom-made to accommodate a variety of sensor types as they pertain to the parameters of your project. The framework for building a FlexDAQ Data Logger is dependent on the type, number, precision, and speed of measurements required. Best of all, FlexDAQ Data Loggers arrive to you completely pre-assembled, pre-wired, pre-tested, and pre-programmed; ready to be put to work straight out of the box with minimal set-up.

All FlexDAQ Data Loggers bear similarities in measurement and programming capabilities and can easily incorporate additional sensor and telecommunication options.

## FlexDAQ Data Loggers Specifications

**FlexDAQ Data Loggers can be customized with an assortment of features, including, but not limited to the following:**

Fit up to 10 Flexi-Mux in a 20"x16"x8" enclosure.

Set alarms to send notifications from remote locations

Take static and dynamic readings from 20Hz to 333Hz. Note that 200Hz+ dynamic readings may be limited depending on complexity of the project.

Retrieve data easily with scheduled retrieval, forwarded through FTP.

Connect analog and digital sensors (4-20mA, Voltage, SDI12, MODBUS, voltage differential/single ended)

Monitor slope, earthquake, and weather, etc.

Use solar panel or battery with either satellite or cellular modem (with available data plans) for remote monitoring. Note: Two-year data plan is available on certain RSTAR hubs and FlexDAQ loggers with cell modem options.

Retrieve data from multiple RSTAR DT Loggers with a fixed interval.

## AVAILABLE CONFIGURATION OPTIONS

**Available standard design options include hardware to monitor following sensors through ethernet or cellular on AC, low or high solar and battery capacity and different mounting options such as wall mount and 1.5", 2" and 2.5" pole mount.**

Up to 10 direct-wired vibrating wire instruments with thermistors

Up to 10 direct-wired IPI or tiltmeter strings

Single direct-wired ShapeArray

DT loggers via RSTAR wireless communication

## FLEXI-MUX FEATURES

| ITEM | SPECIFICATION |
|---|---|
| Power | 12 Vdc (under load), unregulated |
| Current Drain | 10µ quiescent; 8 mA active |
| Reset Active Levels, max. | 2.0 V |
| Clock Active Levels, max. | 2.0 V |
| Min. Clock Pulse Width | 1 ms |
| Max. Actuation Relay Time | 20 ms |
| Relay Operation | Break before make |
| Initial Relay Resistance, max. | 0.1 Ohm |
| Max. Switching Current | 1 A |
| Min. Contact Life | $10^7$ closures |
| Operating Temp. | -40°C to 70°C (-40°F to 158°F) - extended |
| Size | 8.15"H x 1.05"W x 3.17"D |
| Weight | 0.24 kg (0.53 lbs.) |

SPECIFICATIONS