





DCP200 GOES Data Collection Platform

Simple point-and-click software

 File Program Tools He Progress 1. New/Open 2. Datalogger 3. Sensors 4. Outputs 5. Finish 	Available Sensors and Devices DCPD0 Sensors Sensors Sol-12 Sensor Water Used R flow CS475/CS477 Radar Water Level Sensor (Version: 1.0) CS408 Pressure Transducer (XPSI Senies 500)		Choose the sensors from a list		
Wing Wing Diagram Wing Text	Properties Wining CS475/CS476/CS477 Red Battery + White C1/SDI-12 Black G Clear ÷ (Ground) Click a wire's caption/color to change its caption/color.		② Wire the sensor according to wiring diagram		
	Platform ID number in Hex (even) 00000000 Timed channel number 0 Timed baud rate 300 v Timed transmission window (seconds) 10 Timed interval (DD_HE_MM_SS) 00_00_00 Timed start time (offset) (HeL_MM_SS) 00_00_00 Random channel number 0 Random baud rate 300 v		3	Configu	re the GOES satellite transmitter
	Random repr Stor Stor	Measurement Processing 75/CS476/C Stage Sample	Stage	Units Feet Volts	Select the data output

Overview

The DCP200 is a data collection platform (DCP) designed specifically for stream stage, water quality, and rainfall applications. This system measures the sensors, processes the measurements, then transmits the data to a receiving station via the GOES system.*

The DCP200 consists of our CR295X datalogger, TX320 HDR GOES satellite transmitter, Yagi antenna, GPS antenna, ENC12/14 enclosure, antenna cables, solar panel, and software. Sensors, mounts, and battery are purchased separately.

Benefits and Features

- CR295X-based system
- > Transmitter certified as High Data Rate version 2 compliant
- > Makes SDI-12, single-ended analog, pulse, switch closure, and bridge measurements
- Transmission rates of 300 and 1200 bps supported

- Automatic GPS correction of clock and oscillator
- > Up to 28 days of operation between GPS fixes
- > Diagnostics and status information that can be sampled by the datalogger and transmitted as part of the data stream
- Independent self-timed and random data buffers

*The TX320 product brochure and web pages provide specifications, the GOES authorization procedure, and methods for retrieving data from the ground receiving station.



Standard Components

- 1 CR295X datalogger
- 2 TX320 GOES satellite transmitter or HughesNet or Iridium
- 3 CH150 regulator
- ENC12/14 environmental enclosure (with six cable entry seals and entry seals for antenna cables)
- 5 SP20 20 W solar panel
- 6 25316 11-dBi right-hand circular polarized (RHCP) Yagi antenna, mounting hardware, and COAXNTN-L12 coaxial antenna cable
- 7 17992 30 dB GPS antenna and 18017-L10 GPS cable
- 8 7623 0.75 in. IPS aluminum pipe
- OM220 right angle mount

Customizations

Mounts

Tripod/Tower/Pole

The DCP200 enclosure can be mounted to a tripod mast (option -MM), tower legs (option -TM), or a 4 to 10 in. outer diameter pole (option -PM).

Crossarms

The GPS antenna is typically mounted to a CM202, CM203, CM204, or CM206 crossarm.

Battery with Enclosure

A user-supplied battery and enclosure is required. The battery needs to be 12 Ah or larger.

Sensors

Any sensor compatible with the CR295X can be used with the DCP200. The CR295X can measure a variety of sensors including SDI-12 sensors and 4 to 20 mA sensors. Sensors that are commonly used with the DCP200 are listed below. Refer to the CR200X-series product brochure for a more complete list of compatible sensors.

Dissolved Oxygen

CS511 dissolved oxygen probe

Turbidity

- > OBS-3+ turbidity sensor with optics on side of its body
- > OBS300 turbidity sensor with optics at the end of its body
- > OBS500 turbidity sensor with antifouling

Temperature

- > 109 temperature probe
- > 109SS temperature probe for harsh environments

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Water Level

- CS451 and CS456 pressure transducers
- CS410 shaft encoder
- CS470 and CS471 compact bubblers
- CS475, CS476, and CS477 pulse radar sensors
- > SR50A sonic ranging sensor

Precipitation

- > TE525, TE525WS, and TE525MM tipping bucket rain gages
- TB4, TB4MM, and CS700 tipping bucket rain gages with siphon



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