![beadedstream logo]

D405 Satellite Data Logger

Log your data without logging the miles. The BeadedStream D405 Data Logger is purpose built for remote deployments and reliable performance in extreme conditions.

Specifications

Main Processor / Firmware	• Ultra low-power 8-bit microcontroller • Multi-threaded custom embedded OS • Firmware upgradeable by end-user
Internal Storage	• 4 MB non-volatile flash memory • Capacity to read 100 DTC sensors once per hour for 12 months minimum
Real Time Clock	• Temperature compensated • Automatically synchronizes to GPS clock time • ± 5 minutes per year
Communication Interface	• USB Specification 2.0 compliant • USB Mini-B connector • Virtual COM port driver available (free) for most platforms
Port Connections	• 3-pin XLR series heavy duty gold-plated contacts • 2 port and 4 port options available • Data lines to all ports can be independently switched • 5V driver available to power DTC sensors if needed
Worldwide Telemetry	• Iridium embedded two-way satellite data transceiver • Integrated Iridium antenna • Iridium is the only telecommunications carrier in the world with 100 percent pole-to-pole coverage through its meshed network of 66 low Earth-orbiting satellites
System Power Requirements	• 6 to 10 VDC (max) input • Sleep mode: 230 µW typical • Active mode: 70 mW typical • Transmit mode: 350 mW (7.5 W max)

D405 Logger Specifications (continued)

Battery	• Rechargeable 6V 5.5 Ah sealed lead-acid battery
Endurance	• 2 months typical w/o solar recharge (Transmitting hourly)
Optional Solar Recharging System	• 1 W nominal (1.75 W max) solar panel with temperature compensated charge control circuit to protect and prolong battery life
Bluetooth	• 2.4 GHz Bluetooth 4.0 low energy built in
GPS	• Embedded 40-channel dedicated GPS processing module • 34-second time to first fix (typical) • Integrated 1575.42 MHz antenna
Contactless User Switch	• Built-in magnetic switch is immune to dust, dirt, mud and water; can be triggered through the case • Switch is preprogrammed: user can initiate temperature readings and transmit data via Iridium • The user switch can also be used to reset the data logger
Operating Temperature Range	• -40° C to +85° C (-40° F to +185° F)
Weight	• 2.3 kg (5.1 lbs)
Dimensions	• 18.0 x 18.0 x 7.9 cm (7.1 x 7.1 x 3.1 in) • Additional clearance required for mounting hardware cable connections and other options such as a sonic rangefinder
Environmental Rating	• NEMA Type 4X IP66 - dust tight, survives water jet • Lexan® polyurethane clear cover • Non-metallic base and cover • Tongue and groove continuous polyurethane gasket seal between base and cover
Mounting	• Non-metallic (FRP) strut; compatible with most Unistrut fittings
Optional Rangefinder	• Designed for snow level measurement this small, lightweight, rugged, ultrasonic outdoor sensor tightly integrates with the D405 • The sensor is also excellent for water surface measurement • Maximum range of 10 meter to large targets • Resolution of 1 cm • Long narrow detection zone • Filtering algorithms yield excellent noise tolerance and clutter rejection • Robust PVC housing meets IP67 water intrusion standard