

Data Vault



DESCRIPTION:

The Cordova Data Vault is the perfect solution for recording operational efficiency for ECUs and any other equipment where uptime and downtime recording is critical. The powerful Data Vault from Cordova Flow Controls has 2 analog and 2 digital inputs with on board pull ups, one radio port, one communications port that can be set to RS232 or RS485 for retrieval of data through existing automation. If no existing automation is available, the Data Vault is capable of storing 500,000 records with automatic rollover of oldest data first and also utilizes two 64Mb memory chips for redundant storage. The Data Vault also contains one USB port used to easily configure the unit and to retrieve the data as well as utilizes smart firmware that will not write to the flash drive or FRAM when power drops below 5.3V, ensuring against possibly corrupt data.

FEATURES:

- Capable of Data Logging with 2 digital and 2 analog inputs, plus battery and temperature
- Data Logging speed up to 1 log per second
- Digital inputs have optional on-board pull ups for contact switches
- Analog inputs can be either 0-30V, 4-20mA, or Type K thermocouples
- Power terminals for analog inputs to support various sensors
- Powered by 12Vdc or 24Vdc, with battery backed system clock
- Flash storage for over 0.5 million records (can hold over 1 yr. of data at one log/minute)
- Redundant, CRC protected storage to help ensure data integrity and prevent data loss
- USB flash drive used for configuration and download of data
- Many configurable items: site names, input names, aliases for digital high/low, analog scaling
- Configurable to log upon digital input changes, and/or analog input thresholds
- Can communicate RS232/RS485
- Pluggable terminal connectors

Log Type	Timestamp	Battery	Temperature/F	Pilot 1	Flare Temperature
USB Connect	3/27/2019 8:22	0		0x	0
Interval	3/27/2019 8:30	12.333	67.8	Pilot On	1519.945
Interval	3/27/2019 9:00	12.078	72.6	Pilot On	1524.745
Interval	3/27/2019 9:30	12.107	74.6	Pilot On	1526.745
Interval	3/27/2019 10:00	13.369	75.7	Pilot On	1527.845
Interval	3/27/2019 10:30	13.601	76.4	Pilot On	1530.545
Interval	3/27/2019 11:00	13.543	83.1	Pilot On	1535.245
Interval	3/27/2019 11:30	13.465	85.9	Pilot On	1539.045
Interval	3/27/2019 12:00	13.456	88.8	Pilot On	1540.945
Interval	3/27/2019 12:30	13.543	86.9	Pilot On	1539.045
Interval	3/27/2019 13:00	13.543	85.2	Pilot On	1537.945



SPECIFICATIONS:

Enclosure	4"x 2.8"x 1"
Power	12vdc or 24vdc with battery backup
2 Analog and 2 Digital Inputs	Up to 30V
Data Retention	>10 years at temperatures below 55°C
Power/Current Draw	2mA(idle)/13mA (comm port utilized)
Digital Input Threshold	~0.7V (transistor input)
Analog Input Accuracy	Larger of $\pm 10\text{mV}$ or $\pm 2\%$
Board Temperature Sensor Accuracy	$\pm 4^\circ\text{C}$
Battery Voltage Input Accuracy	$\pm 2\%$

Note: These accuracies are based on Cordova performing a factory calibration of the analog reference only. If needed, there are a couple of options to improve accuracies, please consult Cordova Flow Controls for these options.

CORDOVA FLOW CONTROLS, LLC

www.CordovaFlow.com

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