

CarefreeLite

The future of SCADA Edge Connection has arrived.



Carefree Lite

Price: \$2,000 + \$35/Month - Bulk pricing available (15+ units)

I/O:

- 4 Discrete (digital) sourcing Inputs (requires relays for system isolation)
- 2 Discrete sourcing outputs* (requires relays for system isolation)
- 2 Analog sourcing Inputs (input range 4-20mA)

Features:

- User customizable UI (user interface)
 - ACS Configured UI with customer input +\$250
- Trending and Reporting
 - Included is a report that gathers data at user defined intervals and time periods and totalizes values if needed
 - More complicated/in-depth reporting available, contact ACS Sales for details/quotes
- Alarms with acknowledgement via UI
- Sequential roster for text and or email alarm notifications
- Review system status on demand via web UI
- System specific QR code for easy status check
- 4G LTE Cat 1 cellular
- Select carrier based on service coverage needed (Verizon, AT&T, T-Mobile) (included in monthly cost)
- Built-in power supply
- M12 Connectors specific to power/input/output for safe and easy installation
- Nema 4X enclosure
- Online user install guide

Device Specifications:

Dimensions: 12L x 12W x 6H (inches)

Weight: 14.6 (lbs)

Base Processor Specifications

Input Voltage Range: 110 / 220 VAC (90-265VAC)

Maximum Inrush current: 1 Amp

Maximum Power Consumption: 10 Watts

Operating Temp: -20 to 60°C (-4 to 140° F)

Storage Temp: -20 to 70°C (-4 to 158°F)

Analog Input Specifications

Number of Channels: 2 Single Ended

Input Range: 4-20 mA

Resolution: 12 bit (1-4096)

Step Response: 1ms for 95% FS

Crosstalk: 1/2 count max, -80db

Input Impedance: 62.5Ω ± 0.1%

Absolute Max Ratings: -30mA to 30mA

Converter Type: Successive Approximation

Linearity Error (end to end): ± 2 counts

Input Stability: ± 1 count

Full-scale Calibration Error: ± 10 counts @ 20mA

Offset Calibration Error: ± 5 counts

Max Inaccuracy: ± 0.3% @ 25°C, ± 0.6% @ 60°C

Accuracy vs. Temperature: ± 50 ppm/°C typical

Recommended Fuse: 0.032 Amp, series 217 fast acting

Discrete (Digital) Input Specifications

Number of Inputs: 6
Input Voltage Range: 11 - 30 VDC
Peak Voltage: 40 VDC
Input Current: 1.92 mA @ 12 VDC, 4.0 mA @ 24 VDC
Maximum Input Current: 5 mA @ 28 VDC
Input Impedance: 5.6k @ 10-28 VDC
ON Voltage Level: > 10 VDC
OFF Voltage Level: < 2 VDC
Min. ON Current: 1.5 mA
Min. OFF Current: 0.2 mA
OFF to ON Response: 2-4 ms, typical 3 ms
ON to OFF Response: 2-4 ms, typical 3 ms
Base Power Required (5V): Typical 30mA (all inputs on)
Optical Isolation: 2500 Volt
Wires: 14 to 24 AWG

Discrete (Digital) Output Specifications

Number of Outputs: 4 sourcing
Output Voltage Range: 11-30 VDC
Peak Voltage: 50 VDC
Maximum Steady State Output Current: 0.1A per output @ 50°C
Maximum Leakage Current: 100µA @ 50 VDC @ 50°C
ON Voltage Drop: 2 VDC @ 0.5A
Continuous Inrush Current: 0.5A (we need to validate this)
Maximum Inrush Current: 0.8A for 10ms
OFF to ON Response: < 2µs
ON to OFF Response: <10µs
Short Circuit Protection: 1 Amp per module, turns off outputs upon short circuit detection
Base Power Required (5V): 40mA, all outputs on
Optical Isolation: 2500 Volt
Wires: 14 to 24 AWG

ACS Recommended Add-ons

- Phoenix Relay Assembly 24VDC (part # 2905289 or equivalent)
- Phoenix Relay Assembly 120VAC - input only (part # 2909776 or equivalent)

Applications for Carefree Lite Product

- **Lift Station Backup Alarms and simple on/off control***
- **Water Well Backup Alarms and simple on/off control***
- **Irrigation System Monitoring and simple on/off control***
- **Remote station monitoring and simple on/off control***
- **Backup notifications for critical systems**

Note: Please notify ACS of other applicable uses for addition to this list

*"Control" is on/off control manually input into the system by users and CANNOT be automated by the system

Using this device outside of its intended purpose could damage the device, or void the device warranty. If you have questions regarding the use of this device in an application that has not been listed, consult a qualified electrical technician.

This device, like any wireless device, operates using cellular telemetry signals which cannot guarantee the transmission and reception of data in all conditions. While the delay or loss of signal is rare, you should not rely solely on any wireless device for emergency communications or otherwise use the device in situations where the interruption of data connectivity could lead to death, personal injury, property damage, data loss, or other loss. Advanced Control Systems accepts no responsibility for any loss or damage resulting from errors or delays in transmission or reception, or the failure of any Carefree Lite device to transmit or receive such data.

User hereby is responsible for consulting local, state, and federal regulations and guidelines pertaining to the use and operation of this device.

By using/operating this device, the user agrees and consents to all disclaimer and warranty information regarding this product. All warranty and disclaimer information is subject to change without notice. Visit our website for current warranty and disclaimer information.
