



# Remote Monitoring and System Maintenance

Continuous Condition and Maintenance Intelligence



## COOL ARROW

The Cool Arrow is a real-time remote monitoring system designed for air conditioners, refrigerators, heat pumps, industrial systems and more.

### IT'S RELIABLE

The ultra-thin yet extremely durable Cool Arrow is a high-performance cellular device designed for remote control, monitoring and maintenance, early warning system and other applications. With an integrated CDMA 1X modem for wireless data communication and nationwide coverage. The built in high performance antennas for cellular radio make installation easy at the system or at the thermostat, with no need to connect to the local/private customer network.

### IT'S SIMPLE

No programming skills required: The Cool Arrow comes with easy-to-configure application software. Reports can be triggered periodically or in response to events such as changes in efficiency, office systems running after hours or on weekends, systems running all the time or not running at all. Notifications can be sent for maintenance, thermostat reprogramming, and more.

### IT'S FUNCTIONAL

The Arrow's interfaces include a line sensing using an optocoupler for sensing the presence of an ON signal from a thermostat or other device, and a normally closed solid state relay that can be used to open a circuit, for example to turn off a compressor or a fan or other.

Optional features include algorithms for energy savings, like the one provided by Smartcool.

### HIGHLIGHTS

- CDMA 1xRTT 850/1900 MHz
- Integrated cellular and GPS antenna
- LED status indicators for GPS and network registration
- Communication via SMS, UDP, Ack UDP
- Over the air configuration and firmware update
- Extended AT Command set for flexible and easy configuration
- Input AC or DC Voltage up to 25V
- Line sensing and normally closed relay

### OPTIONAL FEATURES

- Smartcool energy savings algorithm



## Specifications

### CELLULAR

- 850/1900 MHz dual band CDMA 1xRTT
- Integrated high sensitivity antenna
- Auto register to packet network

### GPS

- Channels: 56
- Tracking Sensitivity: -162 dBm
- Acquisition Sensitivity: -148 dBm
- Location Accuracy: 2.5 CEP

### ENVIRONMENTAL

- Operation Temperature: -30°C to +75°C
- Storage Temperature: -40°C to +85°C
- Operation Humidity: 20% to 90% (non-condensing)
- Storage Humidity: 10% to 95% RH(non-condensing)

### ELECTRIC

- Operating Voltage: 7V – 28V DC or AC

### INTERFACE CONNECTOR

- I/O Connector: 6 Pin connector
- PWR, GND
- Line sensing
- Normally open relay.

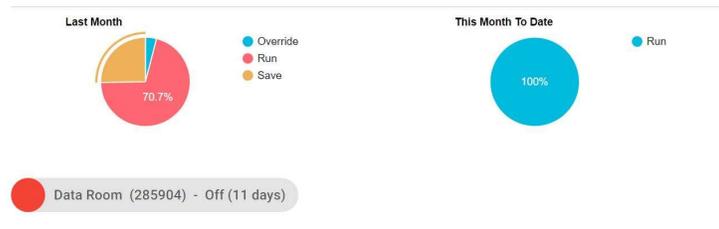
### PHYSICAL

- Dimensions: 140mm x 39.4mm x 15.7mm
- Internal Cellular Antenna

### APPROVALS

- FCC 47 CFR Part 15, Part 22, and Part 24
- Verizon Certified

## EMCOR UK - UU Clearwater 4



Platform Example

## About Connected-Holdings

Connected-Holdings is an end-to-end, vertically integrated, Internet of Things ‘IoT’ intelligent services provider. Our team has over 20 years of experience in developing complex wireless and communication systems, offering a complete portfolio of high-performance tracking systems, cloud software services, and network connectivity. Our devices are designed from the ground up, making them unique in the industry and extremely cost effective.

For more information, contact: [support@connected-holdings.com](mailto:support@connected-holdings.com)

