Your Partner for Cold Chain Solutions

• We Measure • Record • Report • Analyse!

Manufacturing of:
- IIot Product Range
- Data Scanners /Loggers
- Temperature/RH Transmitters/Hygrometer
- Clean Room Monitor

Services For:
- Documentation as per GMP & GLP Guidelines
- DQ - Design Qualification
- IQ - Installation Qualification
- OQ & PQ - Operational & Performance Qualification
- SOP - Standard Operating Procedure
- Mapping & Validation for Warehouse & Cold room
- AMC/CMC on site

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sales1@ambetronics.com  project4@ambetronics.com
Andheri, Mumbai, India

Since 1992
www.ambetronics.com
### Intelligent Monitoring System for Warehouse

- Specially designed for Warehouse Monitoring
- Generally installed at security area for Real Time Temperature monitoring and alert at security area.
- Large LCD Display (4.3”, 7” or 10.2”)
- Real time alarm indication via channel blinking.
- Special alarm snooze option or repeated alarm

### Universal Data Logger-TC-800D/TC-1600

**PANEL MOUNT - 8 CH.**

**WEATHERPROOF - 8 CH.**

**PANEL MOUNT-16 CH.**

**INPUT:**
- RTD PT-100 Sensor for Temperature
- 4-20mA for Humidity Sensor

**OUTPUT:**
- 2 relay output • RS-485)

**ACCURACY:** ± 0.25°C for -30°C to 50°C

### Smart IoT Module Series

**Smart IoT Module**

- Real Time Cloud Monitoring
- SMS Alert

**FEATURES:**
- Inbuilt FLASH memory up to 100,000 records saved for protection against network failure
- In built Buzzer for fault detection or connection issues

### Smart IoT Bridge for Remote Monitoring

**SIB2G485**

- Compatible Nodes - 48 • Cellular
- Dual SIM card • LED - 4 x Bicolor
- SMS & E-mail alert from device
- Network failure logging • Buzzer
- Cloud connectivity • MODBUS RTU
- Communication protocol LoRa
- Data Interval - 10 to 60 Minutes
- MODBUS TCP/IP on request • Buzzer
- LED - 3 x Bicolor • Weight 350gms

**SIBLR485**

- Compatible Nodes - 48
- SMS & E-mail alert from ambeiioit.com
- Cloud connectivity • MODBUS RTU
- Communication protocol LoRa
- Data Interval - 10 to 60 Minutes
- MODBUS TCP/IP on request • Buzzer
- LED - 3 x Bicolor • Weight 350gms
**Accessories**

- **3 barrier connector**
  - Zero resistance for RTD Teflon cable
- **Hooter cum Flasher**
  - High volume: 80DB
  - Suitable for open or security area
- **Buzzer**
  - Low volume: 50DB
  - Visual alarm suitable for office area
- **RS-485 to USB Converter**
  - For connecting Data Logger to PC
- **USB-RS485**
  - 10/100Mbps Ethernet
  - TCP/UDP/Telnet Modes
- **ERS-485**
  - 10/100Mbs Ethernet
  - TCP/UDP/Telnet Modes
- **Junction Box**
  - DHCP/Static IP Modes

**Hygrometer, Dew Point Meter Series**

- **TRP-100-1**
  - Temp. & Humidity indication
  - Temp.: -20°C to 70°C
  - Humidity: 0 - 100% RH
  - Dew Point indication
  - Battery operated
  - 10 days backup
  - 50,000 log records
  - USB interface to computer
  - Max. 5 meter extended sensor probe available
- **TRP-100-2**
  - Temp. & Humidity indication
  - Temp.: -20°C to 70°C
  - Humidity: 0 - 100% RH
  - Dew Point indication
  - Battery operated
  - 10 days backup
  - 50,000 log records
  - USB interface to computer
  - Max. 5 meter extended sensor probe available

**Wireless Battery Powered Temp. & RH Transmitter**

- **TRH-100-1**
  - Temp. Range: -20 to 60°C
  - RH Range: 0 to 100%
  - Unit indication, Min/Max / Average function Auto or Manual reset facility
  - Battery operated
  - 10 days backup
  - 50,000 log records
  - USB interface to computer
  - Max. 5 meter extended sensor probe available
- **TRH-100L-WP (Wireless)**
  - Temp. Range: 20 to 60°C
  - RH Range: 0 to 100%
  - Low Power consumption
  - 1 year battery life

**Temperature Thermometer**

- **TFI-260**
  - Range: -30°C to 500°C
  - Accuracy: ± 2°C
- **TTX-110**
  - Range: -30°C to 350°C
  - Accuracy: ± 0.8°C
  - Probe Length: 120 mm

**External Probe USB Data Logger**

- **EBI-310**
  - Range: -30°C to 60°C
  - 0 to 100% RH
  - Temp. Accuracy: ± 0.2°C (-30°C to +30°C), rest ± 0.5°C
  - RH Accuracy: ± 2% (10% to 90%), rest ± 4%
  - Report: Automatic PDF/A1b
  - Memory: up to 1,20,000
- **EBI-300**
  - Range: -30°C to 60°C
  - 0 to 100% RH
  - Temp. Accuracy: ± 0.2°C (-30°C to +30°C), rest ± 0.5°C
  - RH Accuracy: ± 2% (10% to 90%), rest ± 4%
  - Report: Automatic PDF/A1b
  - Memory: up to 1,20,000
- **EBI-310-TH**
  - Range: -30°C to 60°C
  - 0 to 100% RH
  - Temp. Accuracy: ± 0.2°C (-30°C to +30°C), rest ± 0.5°C
  - RH Accuracy: ± 2% (10% to 90%), rest ± 4%
  - Report: Automatic PDF/A1b
  - Memory: up to 1,20,000

**Temp. / RH Logger**

- **EBI-20**
  - Temp. Range: -30°C to 70°C
  - RH Range: 0 to 100%
  - Temp. Accuracy: ± 0.5°C
  - RH Accuracy: ± 3% (10% to 90%) rest ± 4%
  - Report: PDF, Excel
  - Memory: 40,000
  - Software: 21CFR Part11 Compliant
- **EBI-20TH1**
  - Temp. Range: -30°C to 70°C
  - RH Range: 0 to 100%
  - Temp. Accuracy: ± 0.5°C
  - RH Accuracy: ± 3% (10% to 90%) rest ± 4%
  - Report: PDF, Excel
  - Memory: 40,000
  - Software: 21CFR Part11 Compliant

**Temp. Data Logger**

- **RC-5**
  - Temp. Range: -30°C to 70°C
  - Temp. Accuracy: ± 0.5°C (-30°C to 40°C), rest ± 1°C
  - Report: PDF, Excel & Word
  - Memory: 32,000 points (MAX)
  - Resolution: 0.1°C
  - Sensor: NTC
- **RC-5+**
  - Temp. Range: -30°C to 70°C
  - Temp. Accuracy: ± 0.5°C (-30°C to 40°C), rest ± 1°C
  - Report: PDF, Excel & Word
  - Memory: 32,000 points (MAX)
  - Resolution: 0.1°C
  - Sensor: NTC
- **RC-4**
  - Temp. Range: -30°C to 60°C (internal sensor)
  - Temp. Range: -40°C to 85°C (optional external sensor)
  - Temp. Accuracy: ± 0.5°C / 0.9°F (-20°C 40°C), ± 1°C / 1.8°F (other)
  - Memory capacity: 16000 points (MAX)
  - Alarm: enabled, via LCD and buzzer
  - Data interface: USB

**Single Use Temp. Data Logger**

- **RC-5**
  - Temp. Range: -30°C to 70°C
  - Temp. Accuracy: ± 0.5°C
  - Memory: 8,192
  - Temp. Accuracy: ± 0.5°C
  - Logging Interval: 10, 30, 60, 90, 120 min.
  - Temp. Accuracy: ± 0.5°C
  - Data: PDF
  - Temp.: ± 0.5°C
  - Resolution: 0.1°C

**Multi-Use Temp. Data Logger**

- **RC-4**
  - Temp. Range: -30°C to 70°C
  - Temp. Accuracy: ± 0.5°C
  - Memory: 32,000 points (MAX)
  - Alarm: enabled, via LCD and buzzer
  - Data interface: USB

**Button Type Temp. Data Logger**

- **RC-5**
  - Temp. Range: -30°C to 70°C
  - Temp. Accuracy: ± 0.5°C
  - Memory: 8,192
  - Temp. Accuracy: ± 0.5°C
  - Logging Interval: 10, 30, 60, 90, 120 min.
  - Temp. Accuracy: ± 0.5°C
  - Data: PDF
  - Temp.: ± 0.5°C
  - Resolution: 0.1°C

- **RC-5+**
  - Temp. Range: -30°C to 70°C
  - Temp. Accuracy: ± 0.5°C
  - Memory: 32,000 points (MAX)
  - Temp. Accuracy: ± 0.5°C
  - Data interface: USB
  - Temp.: ± 0.5°C
  - Resolution: 0.1°C

- **RC-4**
  - Temp. Range: -30°C to 70°C
  - Temp. Accuracy: ± 0.5°C
  - Memory: 32,000 points (MAX)
  - Temp. Accuracy: ± 0.5°C
  - Data interface: USB
  - Temp.: ± 0.5°C
  - Resolution: 0.1°C

- **RC-5**
  - Temp. Range: -30°C to 70°C
  - Temp. Accuracy: ± 0.5°C
  - Memory: 8,192
  - Temp. Accuracy: ± 0.5°C
  - Logging Interval: 10, 30, 60, 90, 120 min.
  - Temp. Accuracy: ± 0.5°C
  - Data: PDF
  - Temp.: ± 0.5°C
  - Resolution: 0.1°C
APPLICATION EXAMPLES

COLD STORAGE MONITORING for TEMPERATURE/HUMIDITY/CO₂/AMMONIA

TECHNICAL SPECIFICATIONS:
- **CO₂ Detector**:
  - Range : 0 to 10000 PPM
  - Operating Temp. : -20°C to 60°C
  - Storage Temp. : -30°C to 70°C
  - Humidity : Less than 95% non condensing
  - Accuracy : ±2% of full scale
  - Response Time : T-20 < 5 second
                  T-50 < 9 second
                  T-90 < 25 second
  - Protection Class : IP-65 & IP-66

Wireless Monitoring Solution for Pharma/Food/Perishable Goods

Cool Room (Below 25°C)
Ammonia Leak Detection for Compressor and Chilling Plant

Room No.-1

Room No.-2

Room No.-3

Ammonia Compressor & Tank Area

Control / Security Room

APPLICATION EXAMPLES

SMART IoT MODULE SIM2G485

CENTRAL SIM2G485L

Buzzer Cum Flasher

230V AC Mains Supply

MULTICHANNEL GAS MONITOR

CHANNEL PROCESS VALUE

ALARM STATUS

CH-1 CH-2 CH-3 CH-4 CH-5 CH-6 CH-7 CH-8

MODE

HOLD

ACK

PRN

AMBETRONICS

800000

5

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MODE

HOLD

ACK

PRN

AMBETRONICS

800000

5
## Ethylene / Ammonia Detector:

- **Range**: 0 to 50 PPM & 0-100 PPM
- **Operating Temp.**: 0°C to 50°C
- **Storage Temp.**: -10°C to 60°C
- **Humidity**: Less than 95% non condensing
- **Accuracy**: ±2% of full scale
- **Response Time**: 18 second
- **Protection Class**: IP65 & IP66
APPLICATION EXAMPLES

WIRELESS SOLUTION FOR WAREHOUSE MONITORING

Wireless Temp./Humidity Measurement

Base Station Receiver

Floor Plan with over view of all measurements

USB / LAN Network

Local PC

OUR PRODUCT LINE

Process Instruments

Clean Room Solutions

Cold Chain Solutions

Gas Leakage Detector

PLC/SCADA Automation

COLD CHAIN LOGISTICS

Control Temperature Humidity variations

Impacts

• Hampers potency of the pharma products, Food products & Raw materials
• Products dry out or become moist and crumple or stick together due to low or high humidity levels
• Reduces shelf-life & quality of perishable items

Ambetronics Solutions
Wireless Temperature & Humidity Monitoring System

Smart IoT Bridge - SIBLTRH NODE-1

Smart IoT Bridge - SIBLTRH NODE-2

Smart IoT Bridge - SIBLTRH NODE-3

Smart IoT Bridge - SIBLTRH NODE-4

Smart IoT Bridge - SIBLTRH NODE-5

CENTRAL SIM2G485L

SMART IoT MODULE SIM2G485

Cloud Dashboard

MQTT Client

ambeiiot.com

• SMS
• E-mail

MQTT Broker

CLOUD MQTT

Cloud

Dashboard

SIM

HEALTHY/FAULT

NETWORK

GSM ON

COM PORT

SMART IoT MODULE

AMBETRONICS

SIM2G485

SMART IoT MODULE

SIM2G485

Wireless Temperature & Humidity Monitoring System

Wired Solution for Warehouse Monitoring

Data Logger

Buzzer

Local Alarm Panel

8 Nos. x Temperature Sensor

Realtime Monitoring at Head Office

Local PC

Daily E-mail Report and Notification Alert

Data Logger

Buzzer

Local Alarm Panel

8 Nos. x Temperature Sensor

Realtime Monitoring at Head Office

Local PC

Daily E-mail Report and Notification Alert

Manufactured by:

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