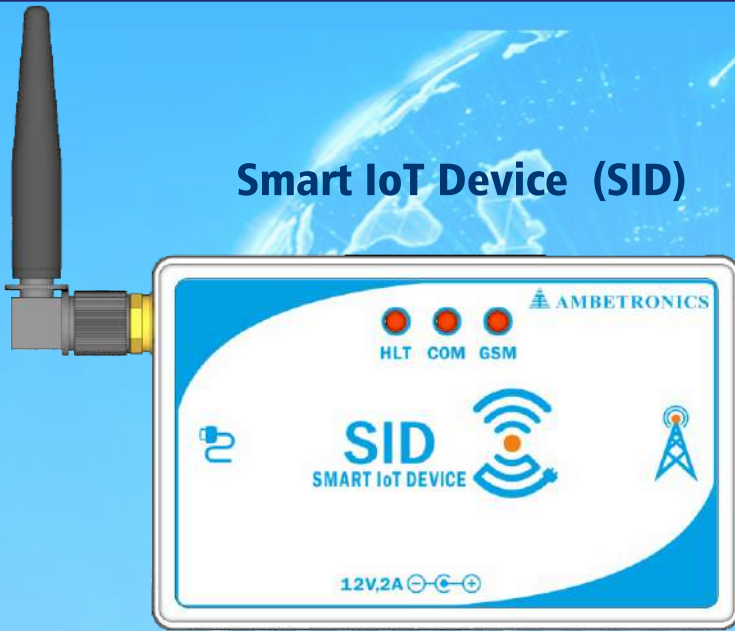
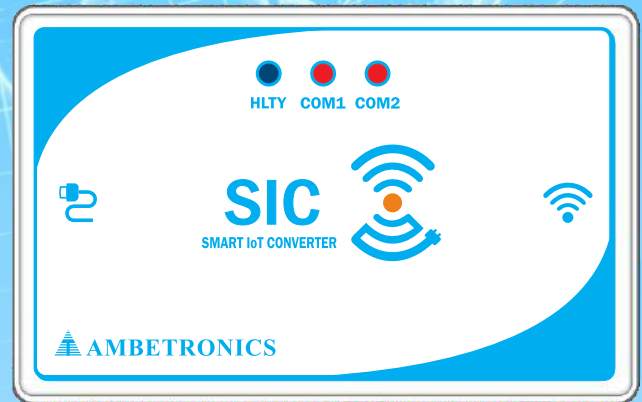


Smart IoT Device (SID)



Smart IoT Converter - (SIC)



OVERVIEW

SIC & SID provides reliable and highly scalable solution for IoT deployment. SIC & SID convertor is versatile device which read the MODBUS memory map of any RS-485 MODBUS protocol device and send the data to the cloud server. The data stored can be viewed as per customer requirement on dashboard. SIC & SID is an ideal solution for online monitoring of RS-485 MODBUS data. SIC & SID mainly consist

of GSM module / Wi-Fi module and microcontroller based control circuit. SIC & SID supports generic MODBUS RTU, MODBUS TCP/IP and MODBUS over TCP/IP Protocols for data acquisition and uses MQTT protocol to communicate with IT application database on cloud. Multiple slave devices can be configured to SIC & SID. It remotely monitors all industrial sensor data to the cloud server.

FEATURES

- 96 - Nodes Compatible with GSM
- Global supporting GSM module (2G-900MHz/1800MHz)
- Settable Alarm set-points for each channel (High/Low)
- Communication Failure detection
- Bi-colour LED indications
- 7V to 24V DC Input
- Adaptor base power supply 12V
- Ethernet/RS-485 /RS-232 Input and Output Port (for SCADA/PLC/PC)
- Wi-Fi/LoRa/IQRF Wireless Input and Output Port
- SMS/Email Notification
- MQTT/TCP-IP Connection
- Cloud Base Support System

		Nodes	Protocol		Input Communication			Output		Configuration	Notification	
Sr. No.	Model No.	No of Slaves	MQTT	TCP-IP (Optional)	RS-485	Ethernet (Optional)	RS-232 (Optional)	2G-GSM	Wi-Fi	RS-485	SMS	E-mail
1	SID2G485	96	✓	On Request	✓	On Request	On Request	✓		✓	✓	✓
2	SICWF485	96	✓	✓	✓	On Request	On Request		✓	✓		

TECHNICAL SPECIFICATION

DEVICE CONFIGURATION

Nodes	: 96 (MODBUS slaves)
Configuration	: AEPL-IIoT PC Software
Operating Mode	: Programming and Applications
Security	: Password protected configuration

CLOUD CONNECTIVITY

Protocols	: MQTT (TCP/IP optional)
Data Format	: JSON
Transmission	: Transparent
Data Interval	: 1 to 60 mins.

INDICATIONS

Healthy	: Blue / Red
MODBUS Communication	: Blue / Red
Network	: Blue / Red

SMS AND NOTIFICATIONS

SMS	: 10 Mobile Numbers
E-mail	: 5 E-mail ID

SERIAL INTERFACE

Supported Baud Rates	: 9600, 19200, 38400, 57600, 115200.
Parity	: None, Odd, Even
Stop Bits	: 1, 2
Protocol Supported	: MODBUS RTU, MODBUS TCP/IP and MODBUS over TCP/IP
Connector	: 3 pin terminal block (DB9/RJ45 Optional)

WIRELESS CONNECTIVITY

Smart IoT Device (SID)

Quad-Band	: 850/900/1800/1900MHz
Antenna	: 3dBi
SIM Slot	: 1
Connector	: SMA Female

Smart IoT Converter - (SIC)

Wi-Fi

- Protocol - 802.11 b/g/n.
- Frequency 2.4GHz

Bluetooth

- Bluetooth Low Energy 4.0
- Range 10 Meter

LoRa

- LoRa/LoRaWAN Protocol
- Range upto 2Kms (Line of Sight)

IQRF

- Based on Radio Frequency
- Range 100 Meters

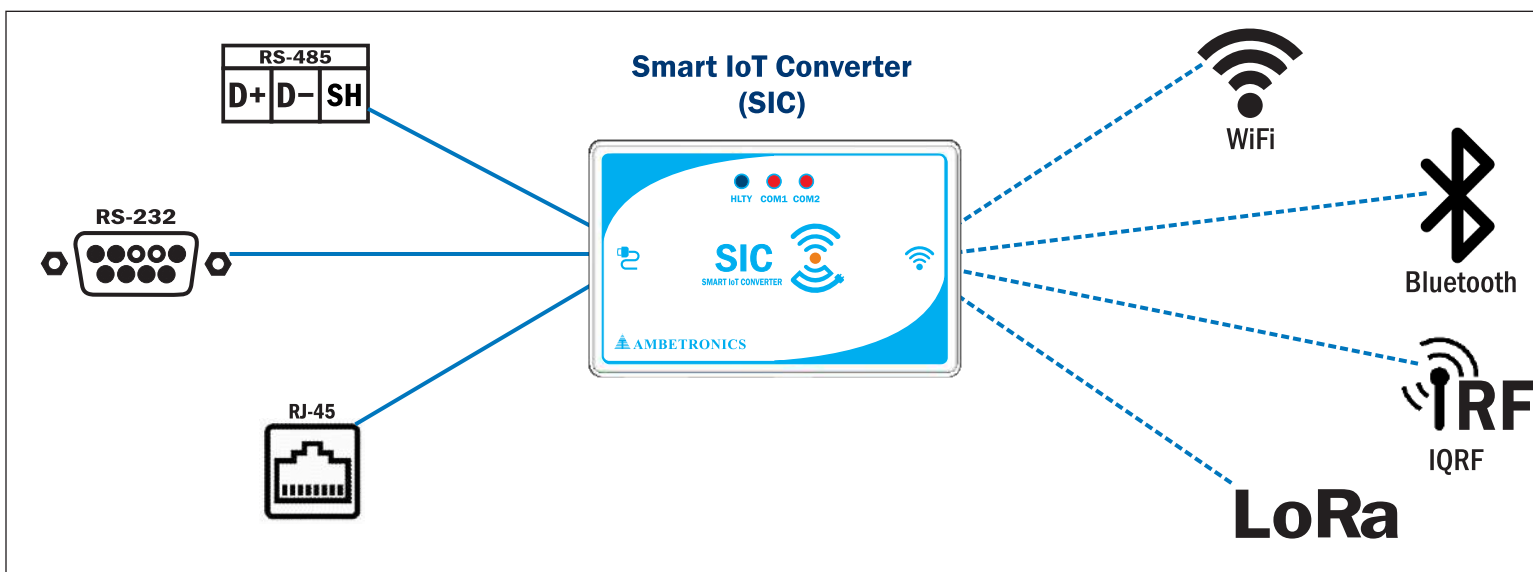
HOUSING DETAILS FOR SID & SIC

Cabinet Material	: Polycarbonate, White colour
Dimension	: 53mm (H) x 86.5 mm (W) x 20 mm (D)
Weight	: Approx 100 grms.

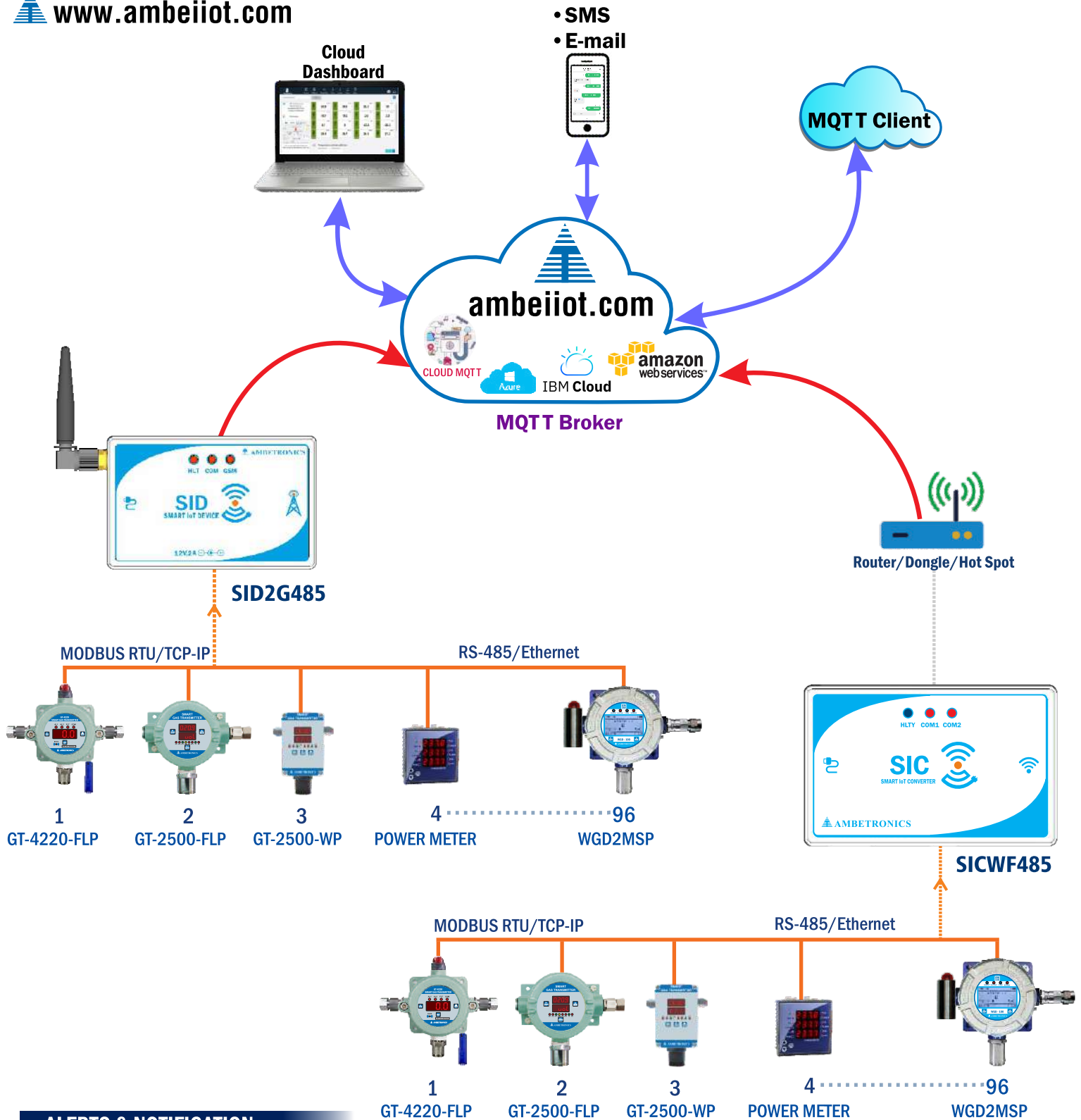
ENVIRONMENTAL SPECIFICATIONS

Temperature Range	: -10° C to 50° C
Relative Humidity	: 10% to 90% RH, Non- Condensing

SIC APPLICATIONS



Interfaces of Smart IoT Device & Converter







ALERTS & NOTIFICATION

SMS Format





CH:01 (TRH-554-T)
 ST: AL-1:HIGH
 PV: +35.3 DEGC
 LOC: Mumbai
 UID: SID760595
 RSSI: -55

CH:01 (TRH-554-T)
 ST: OK
 PV: +19.2 DEGC
 LOC: Mumbai
 UID: SID760595
 RSSI: -55

E-mail Format

 Reply
  Reply All
  Forward
 Mon 7/1/2019 12:12 PM
 SID-AMBETRONICS <ambeiiot@ambetronics.com>
 SID-AMBETRONICS
 To rnd@ambetronics.com

CH:01 (TRH-554-T)
 ST: AL-1:HIGH
 PV: +25.0 DEGC
 LOC: Mumbai
 UID: SID760595
 RSSI: -61

 Reply
  Reply All
  Forward
 Mon 7/1/2019 12:12 PM
 SID-AMBETRONICS <ambeiiot@ambetronics.com>
 SID-AMBETRONICS
 To rnd@ambetronics.com

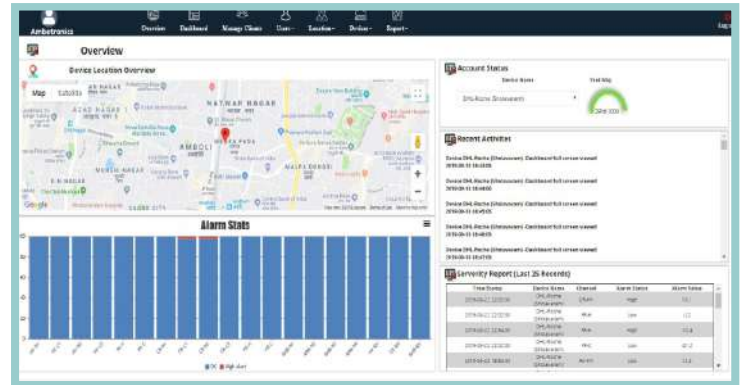
CH:01 (TRH-554-T)
 ST: AL-1:HIGH
 PV: +25.0 DEGC
 LOC: Mumbai
 UID: SID760595
 RSSI: -61

Browser Views

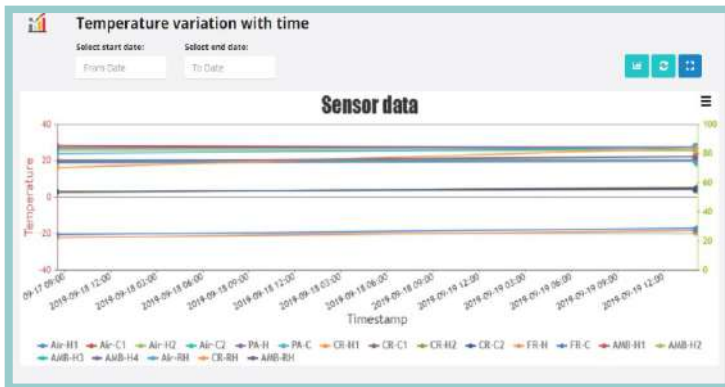
DASHBOARD



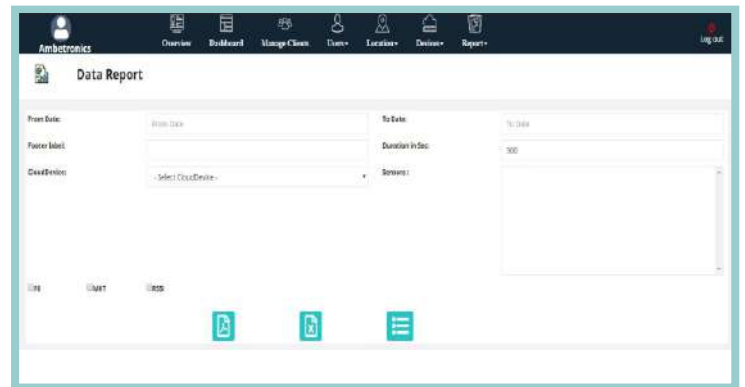
OVER VIEW



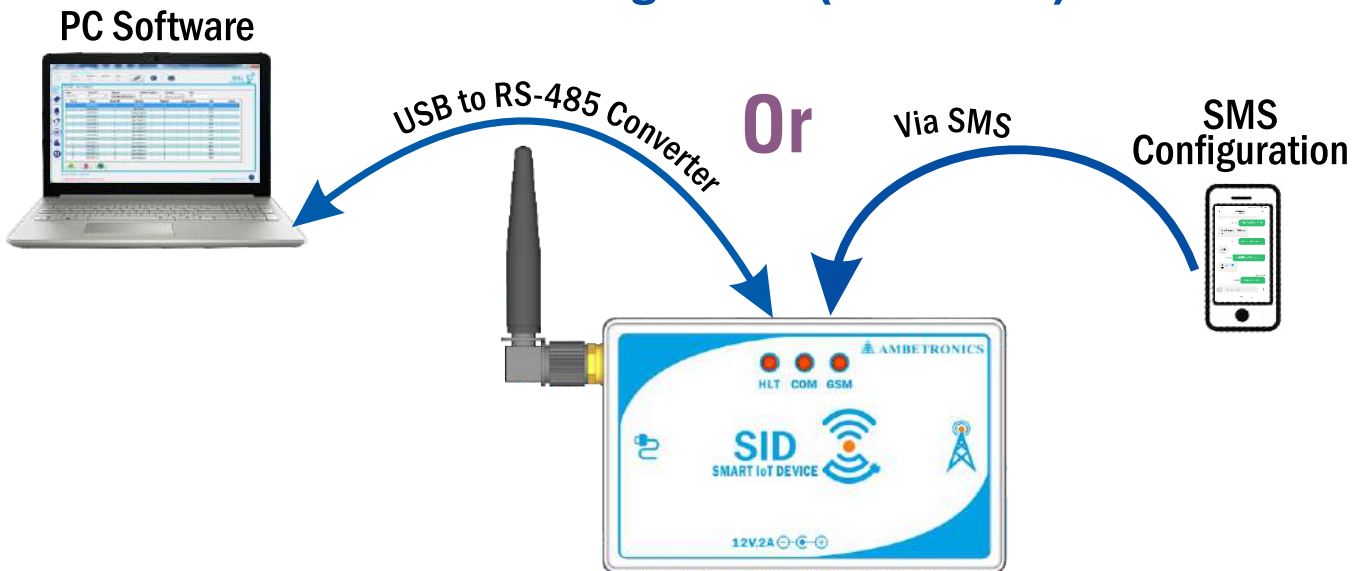
LIVE GRAPH



REPORTS



Device Configuration (SID2G485)



Manufactured by :

AMBETRONICS ENGINEERS PVT. LTD.

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