Cost-effectively manage cryogenic liquid gas tanks remotely over the Internet with wireless, compact, highly sensitive sensor, and solar powered to reduce installation time and cost - from 1 m³ to 60 m³ - Industrial and Medical gases - Oxygen, Nitrogen, Argon, Carbon Dioxide, and Nitrous Oxide

**Measure** actual use accurately

**Predict** expected tank level

**Monitor tank** pressure and level

**Alerts & Notifications** to manage unusual issues

**Manage Assets** for continuous availability

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**HIGH PERFORMANCE COMPACT CRYOGENIC GAS TANK PRESSURE & LEVEL REMOTE MONITORING DEVICE**

**JUST IN TIME CRYOGENIC LIQUID GAS DELIVERY SAVES TIME AND MONEY**

Cryogenic liquid gas use is gaining popularity. As a gas supplier you want to supply gas to customer tanks, and as a gas user you want to ensure that you have adequate supplies to run your business: Both parties need to know how much liquid gas is in the tank and when to deliver or reorder. The supplier is able to manage its production and use their logistical assets more efficiently and cost effectively. The user is able to reorder in a timely manner and manage their gas supplies in the most efficient way.

**CRYOGENIC LIQUID GAS MONITORING DEVICE**

For the last 25 years AMBRA Sistemi S.R.L, Italy (AMBRA) has been a prominent leader in the cryogenic liquid gas monitoring device field. Their solutions are used by AIR LIQUIDE, AIR PRODUCTS, MESSER, LINDE, PRAXAIR, SOL, and various other gas suppliers. The monitoring device is wireless, compact, self-contained and tightly integrates AMBRA's highly precise single unit dual sensor for pressure and level with electronics for output signal technology and telemetry for remote monitoring.

**REMOTE MONITORING**

Device setup, installation and configuration are easy, fast, and inexpensive. The GSM SIM card needs to be installed in device. The initial handshake is done with the GASOTRAK host, and then messages from the device are received on the host on a periodic basis via GPRS over GSM network.

GASOTRAK HOST is a cloud based software solution that provides remote monitoring. Easily view data, adjust monitoring levels and designate recipients to receive alerts via email/SMS by logging into the system via internet.

**MONITOR MEANINGFUL DATA FREQUENTLY**

Set multiple monitor levels for tank level and low/high pressure levels. Device may be configured locally or remotely. The device provides low temperature alarm for detecting line freeze.

The device is normally in sleep mode to conserve battery power. It is configured to activate periodically in increments of 1-24 hours to update the device display and send monitoring and alarm data.
AMCT250* SPECIFICATIONS
*Custom device using AMBRA Mini Criotel 2/50 0001-20-111

DEVICE PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

Enclosure & Dimensions: White aluminum enclosure for wall mounting
200 x 170 x 90 mm / Additional for Solar panel or Direct power supply option

Weight: 4.50 Kg
Additional 1.200 Kg for solar panel option
Additional box for Direct power supply option

Display: 1st LCD display for 4 digits for level
2nd LCD display for 4 digits for pressure
1st red led for unit fail
2nd yellow led for data communication

User Button: Wake up push button on front panel

Battery Pack Power: Rechargeable 3.7 volt Lithium Ion 3600 mAh
Maximum electric current 300 mAh

Operating Temperature: - 20°C to 60°C

Environmental Sealing: IP 65 (Dust tight and water proof)

DEVICE PERFORMANCE CHARACTERISTICS DRT TRANSDUCER

Relative Pressure Range: 0-50 bar / Resolution 100 mbar
Full Scale:
Combining Error (0 to 50°C): Less than ±1 % of Full Scale

Breaking Overpressure: Greater than 75 bar for Optional Range

Differential Pressure (level) Range:
0-2 bar / Resolution Less than ±1 % of Full Scale (F.S.)

Combining Error (0 to 50°C):
Less than ±2 % of Full Scale @ Greater than or equal to 150 mbar

Differential Overpressure: ±2 bar limited by integrated protection devices

DEVICE REGULATORY

General: Approved for use as per European standards

Low Voltage: DE 2006/95/EC

EM: DE 2004/108/EC C
EN 61000-6-1, EN 61000-6-1

DEVICE WARRANTY

Materials & Labor: 12 months from date of shipment

General: When operated under normal and proper conditions. When product remains unmodified.

DEVICE PERIPHERALS AND ACCESSORIES

Solar Panel Power Supply: PS024 Kit complete with 5 watt solar panel, stirrup for mounting, and cable for power supply 0.8 m (AMBRA 0001-00-100 Kit Solar Panel)

Direct Power Supply: PDUVNF 110 – 230 V AC
24 V DC, 1.2 A switching power supply
PVC housing for wall mounting IP63

Pneumatic connection: FMNF25 1/4" NPT female
FGF25 1/4" G female

Other Accessories: FMNF3 3 way manifold

Extended Warranty: WEXT3 3 year extended warranty available

DATA COMMUNICATION

Modem: Integrated quad band modem
850/900/1800/1900 MHz

Technology: GPRS communication over GSM network

Device Configuration: SMS configuration message from host

Data Transmission: Every 1 to 24 hours
Configurable in increments of 1 hour

GSM Network: Customer to arrange for GSM service and Standard 2FF mini SIM card

REMOTE MONITORING SOFTWARE SERVICE

Solution: Web based application offered as Software-as-a-Service over the cloud accessible 24 x 7 using web browser

Technology: Flexible and modular architecture using latest technologies

Monitoring: One device is installed on each tank
Device generated data is sent over integrated modem and collected using point to point data transmission over GSM network using GPRS/TCP IP

Alarms & Levels Reporting:
In Real Time sent by SMS / Email to assigned persons

Administrator:
Customer designated administrator may provide user login rights to its one or multiple tanks
Configure devices

User:
May view Tank data allowed by customer administrator
Tank Listing, Tank Status, Usage Trends, Alarms & Failures history
User may select interface from multiple languages offered

*GASOTRAK AMCT250 = AMBRA Mini Criotel 2/50 0001-20-111