

## PRODUCT DATA SHEET



Cost-effective Local and Remote Telemetry Monitoring Solution to manage cryogenic liquid gas tank (vertical or horizontal) using a wireless, compact, sensitive sensor, and solar-powered to reduce installation time and cost - 1 m3 to 60 m3 - Industrial and Medical gases - Oxygen, Nitrogen, Argon, Carbon Dioxide, and Nitrous Oxide Easy, fast, and inexpensive installation for setup and startup



Measure accurate actual use

Predict expected tank level

Monitor pressure and level

Alerts to manage issues

Manage for continuous availability

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

# JUST IN TIME, CRYOGENIC LIQUID GAS DELIVERY IT 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\reorder. As a result, the supplier can manage its production and use its logistical assets more efficiently and cost-effectively. Likewise, the user can reorder promptly and manage their gas supplies most efficiently.

## **CRYOGENIC LIQUID GAS MONITORING DEVICE**

For 30 years, AMBRA Sistemi S.R.L, Italy (AMBRA) has been a prominent cryogenic liquid gas monitoring business leader — Solution in use by AIR LIQUIDE, AIR PRODUCTS, MESSER, LINDE, PRAXAIR, SOL, and various other gas suppliers.

The solution integrates with a patented AMBRA device - A wireless and self-contained, compact telemetry remote monitoring device that tightly integrates a highly precise single unit dual sensor for pressure and level with electronics for output signal technology.

#### REMOTE MONITORING

GASOTRAK HOST is a cloud-based software solution that provides remote monitoring. Log on to the solution over the Internet and easily view data, adjust monitoring levels and designate recipients to receive alerts via email\SMS.

Device setup, installation, and configuration are easy, fast, and inexpensive. First, install the GSM SIM card on the device. Next, initiate a handshake with the GASOTRAK host, and then messages from the device are received on the host periodically using GPRS over 4G GSM networks.

# MONITOR MEANINGFUL DATA FREQUENTLY

The monitor runs on battery-operated solar power and uses minimum power - pre-configured and fully assembled - easy to install, configure, and use.

The device is generally in sleep mode to conserve battery power and configure it to activate periodically in increments of 1-24 hours to update the device display and send monitoring and alarm data.

Set multiple monitor levels for tank level and low\high pressure levels. Configure the device locally or remotely. In addition, the device provides a low-temperature alarm for detecting line freeze.



## PRODUCT DATA SHEET



# **SPECIFICATIONS**

\*Custom device using AMBRA MiniCriotel 2/20 0001-20-111

DEVICE PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS		
Electronic Enclosure	White aluminum enclosure for wall mounting,	
	size 200 x 170 x 90 mm, waterproof degree IP 65,	
	complete dimensions with solar panel 250 x 435	
	x 186 mm (Dust-tight and waterproof)	
Weight:	3.5 Kg / 4.0 kg solar panel included	
Display:	4 digits large LCD for level H18 mm	
1 /	4 digits large LCD for pressure H18 mm	
	Level to % conversation pushbutton	
	1st red led for unit fail	
	2nd yellow led for data communication	
User Button:	Wake up push button on the front panel	
Power Supply:	24 Vcc ± 5 % 0,35 A / Solar panel 100 mA @	
11,	max. solar exposition	
	Backup battery: 3.7 V 3.6 Ah Li-ion	
Operating	- 20° C to 60° C	
Temperature:		
Pneumatic connections	1/8" G female with fitting adapters 1/4" NPT	
	female or 1/4" G female	

## **DEVICE PERFORMANCE CHARACTERISTICS DRT TRANSDUCER**

Pressure and level	Relative pressure
(patented DRT	Range: 0-20 bar (standard); 0-50 bar (optional)
Transducer)	Resolution: 0.1 bar
	Combined error $(050  ^{\circ}\text{C})$ : $< \pm 1 \%$ of F.S.
	Breaking overpressure: 35 bar (80 bar for range 0 - 50 bar)
	Differential pressure (level):
	Range: 0-2 bar
	Resolution: (programmable by user)
	Combined error $(050  ^{\circ}\text{C})$ : $< \pm 2 \%$ of F.S @ F.S.
	≥150 mbar
	Differential overpressure: ± 4 bar limited by integrated
	protection devices
Reference Standards	2014/35/EU LVD, 2014/30/EU EMC, RoHS
	2011/65/EU EN 61000-6-1, EN 61000-6-3 ISO
	15001 BAM M 034-1

#### **DEVICE WARRANTY**

Materials & Labor:	12 months from date of shipment
General:	When operated under normal and proper conditions. When the product remains unmodified.

#### DEVICE PERIPHERALS AND ACCESSORIES

Solar Panel Power Supply:	Included 00-100 solar panel, stirrup for mounting,
	and cable for power supply 0.8 m
Direct Power Supply:	20051 AR24i: 230 Vac/ 24 Vcc - 1.2 A switching
	power supply, Isolation transformer 230Vac/230Vac,
	filters, PVC housing IP56 for wall mounting. size
	190x140x70 mm
Extended Warranty:	Three years extended warranty available

# DATA COMMUNICATION

	communication
Technology:	GPRS communication over GSM network
Device Configuration:	SMS configuration message from the 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	G SOFTWARE SERVICE The web-based application offered as Software-as-a-
Solution.	Service over the cloud is accessible 24 x 7 using a web browser
Technology:	Flexible and modular architecture using latest technologies
Monitoring:	Install One device on each tank
	The device-generated data is sent over an 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

May view Tank data allowed by the customer

Tank Listing, Tank Status, Usage Trends, Alarms &

Users may select an interface from multiple languages

Configure devices

administrator

Failures history

offered

Integrated modem 4G with GPRS data



User:

# www.trakaid.com

Shelton Pointe, Suite 401, 2 Trap Falls Road Shelton, CT 06484-4665, USA Tel: +1-(203) 925-8388 email: support@trakaid.com



## www.ambrasistemi.it

Strada del Portone 125, 10095 Grugliasco TO -Italy, Tel: +39 011 9677775, email:

All trademarks or registered trademarks are the property of their respective owners.

Specifications are subject to change without notice.

For more information please visit www.trakaid.com/gasotrak