



This versatile transmitter is designed for refrigerated container Tracking and Monitoring. The AGT-AL is a natural evolution of the ACT-AL and includes interfaces for various analog sensors and logical gates. Operations are simple and maintenance is reduced to a battery change after more than a year of operations.

MAIN FEATURES

The AGT-AL (Argos Global Tracker with Analog/Logical inputs) has been specifically developed to be installed on tank and dry containers that are fitted with temperature-control equipment (a reefer engine or a heating machinery). It comes in one single box with an internal battery pack for more than a year of operations. The AGT-AL is robust and can transmit various sensor derived information.

The AGT-AL comes standard with a CLR-V, a battery pack, a temperature probe and the connectors for the sensors.

MAIN OPTIONS

- **Temperature probe.** The AGT-AL comes with the LM35CZ temperature probe to transmit the temperature of a product like the liquid in a tank container. The probe is rated between -50°C and $+150^{\circ}\text{C}$. Optionally, it is possible to use another temperature probe for high temperature readings for instance (over 150°C).
- **Transmission mode.** The AGT-AL can be factory set-up to transmit either data only when the satellite flies over or it can record one sensor data and transmit complete history for this sensor (see operating modes).
- **Antenna.** For dry boxes or reefers, the AGT-AL may be connected to a CLD antenna instead of a CLR-V.

PHYSICAL CHARACTERISTICS

Size	80x160x390mm (3.1x6.3x15.3in).
Weight	7kg (15 lbs)
Connectors	2 data input ports, TNC for antenna

Environment	Splashproof (IP67)
Installation	Brackets provided (transmitter and power pack)
Antenna	CLR, CLR-V or CLD
Miscellaneous	Transmitter is turned on when connected to the power pack.
Radiated Power	2 W
Operating Temperature	-20°C to +50°C (-4°F to +122°F)
Storage Temperature	-40°C to +80°C (-40°F to +176°F)
Power Supply	12 VDC ±2 VDC
Power Consumption	Standard Alkaline battery pack: more than 18 months (Basic Tracking and monitoring, about 6 reports a day)

OPERATING MODES

The AGT-AL can accommodate the Basic Tracking and Monitoring Service.

Interface to sensors includes:

- 6 logical gates (max 5V, 50kΩ impedance). State 1 when open, state 0 when closed
- one analog 4-20mA
- one analog input 0-1V
- two analog input 0-5V

There are two different operating modes:

- The “instantaneous mode” where you get, on each report, data from all sensors
- The “memory mode” where you get also stored data for sensor 1 (there is a reading every hour that is stored and transmitted). This allows to get a complete history of values of sensor 1 (generally temperature).

When ordering please provide:

- Antenna required (CLR-V or CLD) and cable length
- Temperature range for calibration of the sensor (à 100°C range between -50°C and +150°C, default being 0°C-100°C)

DATA TRANSMITTED

Instantaneous message is 64 bits long and includes:

- 6 logical gates data (0 or 1)
- Battery voltage
- 3 Analog inputs coded on 8 bits each
- Checksum

Memory message is 160 bits long and contains the same information plus:

- 11 stored readings of sensor 1

APPLICATIONS

- Tracking tank containers and monitoring various parameters such as: temperature of the product, status of a reefer engine (ON/OFF, alarm states, battery status, etc...)
- Tracking and monitoring reefer containers with transmission of data such as supply air temperature, return air temperature, status of the reefer engine (ON/OFF), alarm flags, defrost status, etc...