

a <b>xylem</b> brand

### ARGOS TRANSMITTER 2965/3608

Permits transmission of data, from and the position of remotely located Automatic Weather Stations 2700 and Data Buoys 4280 via the Argos Satellite system.

The Argos Transmitter allows long distance transmission of data from remote Automatic Weather Stations, Data Buoys or other installations when the use of cable, VHF radio or telephone line is not practical or possible. The transmitter also facilitates a positioning system.

The transmitters are built into a 2.5 inch O.D. aluminum housing. The 2965 type has a female cone that fits on top of Automatic Weather Stations or Moored Data Buoy. It can also be fastened to a wall using Mounting Bracket 2806.

The 3608 version has a standard Aanderaa sensor foot with a 6-pin Lemo receptacle mating plug 2828L.

A 50  $\Omega$ , ¼ ground plane whip antenna with good, wide angle, omnidirectional radiation pattern is placed on top of each unit.

The Argos transmitter contains an interface and a PTT unit (Platform Transmitter Terminal). The interface converts the data from the platform (Data Buoy, AWS etc.) and sends the data further to the PTT unit. The PTT transmits the data on 401,650 Mhz frequency to the satellite.

The transmission repetition rate is selectable between 100 and 200 seconds for «data-collecting-only» platforms and between 40 and 60 seconds for «ground position» platforms.

The maximum message length is 256 bits. This allows transmission of up to 24 10-bit sensor readings from the platform. One 10-bit word is used as a record counter

to indicate the number of data sets send from the platform to the transmitter. Each message from the PTT includes a unique identification number.

The repetition rate, message length and the identification number has to be ordered by the user from Toulouse and given to Aanderaa Data Instruments when ordering the Argos transmitter.

The Argos satellites are placed in polar orbits with altitude of approximately 850km. As each message is acquired, the satellite records the time and date, measures the carrier frequency and demodulates the platform identification number and data.

These data are then formatted and stored by one of the onboard magnetic tape recorders. Each time the satellite passes over one of the three telemetry stations, the data recorded on tape are read out and transmitted to ground. The average period between telemetry station contacts is 100 minutes for each satellite, which corresponds to the orbit period.

The data are available from CNES Toulouse Space Center, where the Argos Data Processing Center is located, less than 6 hours after the satellite received the corresponding message from the platform.

Number of satellite passes where the satellite is «visible» to the platform depends on the latitude where the platform is placed. This number is approximately from 7 to 28 passes with latitudes between  $\pm 0^{\circ}$  and  $\pm 90^{\circ}$ .

## Specifications 2965/3608

Serial No.....



Frequency: Repetition Period: \*) Transmitting Length: \*) I.D. Number: \*) Supply Voltage: Output Power: Output Impedance: 50 Ω. Input Impedance: **Current Consumption:** when Transmitting: <1.2A. Temperature Range: Antenna: Mechanical Connection: **Electrical Connection:** Material and Finish: Net Weight: Warranty:

401.065 MHz UHF. . seconds. ..... bits 7 to 14 volts. 2 Watts. 100 kΩ. 1mA (stand by) -40 to +60°C. Y/4 ground plane whip antenna. (2965) Cone joint. Mates male cone of other Aanderaa field equipment in 2" tubing. (3608) Standard Aanderaa Sensor Foot. (2965) Aanderaa 18 pin Plug 2931 (3608) Aanderaa 6 pin plug 2828 Aluminum 6061T, anodized 20µ. (2965):1 kg (3608): 790 gram Two years against faulty material and workmanship.

\*) Allocated by Argos when ordered.

Aanderaa Data Instruments must be informed to take care of it.

## Transmitter Type 2965 **PIN CONFIGURATION** Receptacle, exterior view; pin = •; bushing = 0

NC NC 10 9 NC 11 8 NC NC 18 -9V 1 NC 2-System ground 17 Ъ 6 0 . NC 12 Ð • 7 -NC Ð . NC 16 Ø . 3 NC 4 - Control Voltage NC 15 NC 13 6 NC

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# Transmitter Type 3608 PIN CONFIGURATION

Receptacle, exterior view;	bushing = $\circ$ ; pin = $\bullet$
-9 volt	4 ── Bridge voltage
Control Voltage-2-	5 Signal
System ground —1	6-Bridge ground

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