Remote Monitoring and Control

Remote Telemetry and Control Unit (RTCU) via TETRA/GSM

Extremely cost efficient alarm monitoring and remote control of distant technical installations making extensive wiring super-fluous. Connects by I/O to technical installations. Can be configured to send TETRA SDS or GSM SMS text messages if an input runs high or low. Control technical installations from your radio (i.e. opening gates, adjusting technical inputs and so on).
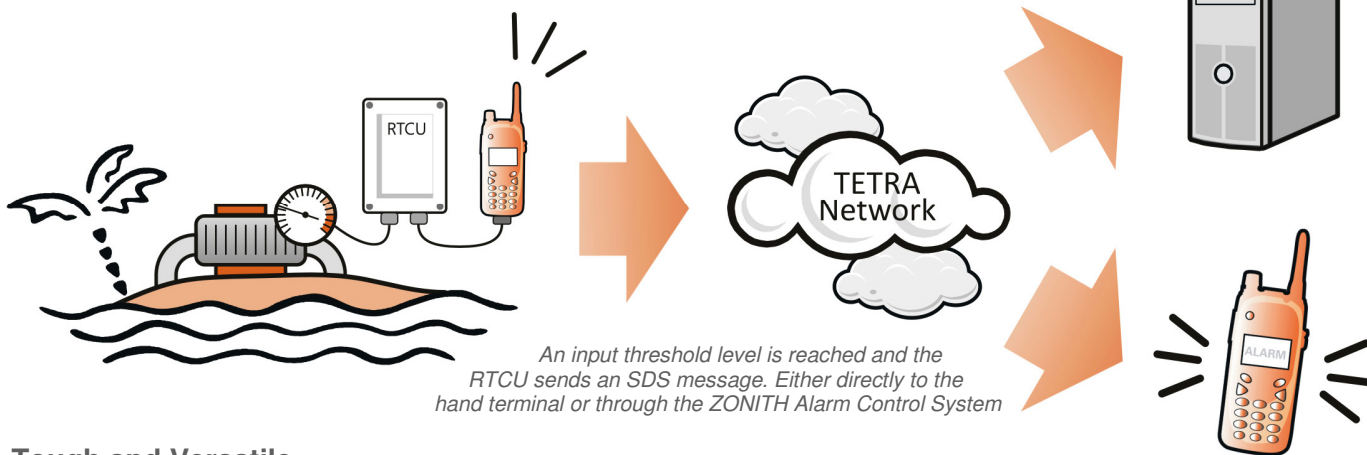
TETRA based Monitoring and Control

Whenever there is a need for secure and reliable monitoring and control of remote technical installations, Zonith's Remote Telemetry and Control Unit (RTCU) will do the job. Saving you miles of cables it wirelessly transmits alarms safely to personnel.

Remote installations that previously had to be controlled manually can now be monitored and controlled by personnel on the ground on their TETRA radios or a dispatch application like the ZONITH Alarm Control System.

Effortless Functionality

It is easy. All you have to do is follow a few configuration instructions. When you have configured the RTCU, it gives you instant information if something needs your attention. The RTCU sends text messages when an input is activated or when a threshold value for an analogue input has been reached. Output signals or relays can be activated by sending SDS text messages to the unit. Alternatively - or as a fail-over option - the RTCU can operate by SMS.

An input threshold level is reached and the RTCU sends an SDS message. Either directly to the hand terminal or through the ZONITH Alarm Control System

Tough and Versatile

Zonith's Remote Telemetry and Control Units are characterised by their high quality, reliability and robustness even in harsh environmental conditions. Thus enabling you to easily monitor and control exposed installations.

Easy SDS Configuration

The RTCU is easy to make operational. Plug it in, connect it to a Sepura or Motorola radio and configure the I/O's by SDS or SMS messages. The units are delivered pre-configured for control and monitoring and no programming is needed.

Adding Enhanced Automated Response

Combining multiple RTCU's with Zonith's central alarm handling solution, ZONITH Alarm Control System, will enable quick response to any alarm type at remotely located installations. The ZONITH Alarm Control System monitors SDS based alarms from the RTCU and ensures automatic notification of personnel. The RTCU has a Heart Beat-function, which ensures immediate reaction if the unit or network is down.

Telemetry Units
Zonith can deliver the RTCU as specified in the table below.

Specifications	RTCU AX9
Physical Data	
Mounting	Surface Mounting
Dimensions (mm.)	W130 x H180 x D50
Weight	0,88 Kg.
Protection Class	IP67
I/O Signals	
Digital Input signals (Low = 0 V, High = 24 V)	5
Digital Output signals (24 VDC)	0
Output Relays (230 VAC / 5 A)	4
Analogue Input (0-5 V)	4
Analogue Output (0-5 V)	4
I/O Expandable	Yes
Power Source	
230 VAC supply (build-in AC power unit)	Yes
Supply via external 24 VDC	Yes
Battery Backup (internal)	Option
Message Type	
SDS using Sepura TETRA radio terminals	Yes
SDS using Motorola TETRA radio terminals	Yes
SMS using GSM network (build-in modem)	Yes
Failover to SMS in case of failed SDS delivery	Yes
Appearance	

RTCU AX9 I/O Expansion Unit
The RTCU AX9 can be expanded with up to 5 I/O Expansion Units (shown in table) increasing the number of I/O signals. For instance, the AX9 unit with one I/O Expansion Unit will have 16 digital inputs (4 + 12). The A9i and the Expansion Units connect via an RS485 serial bus cable. The RTCU is provided with wiring instructions. TETRA radio terminals, interconnection cables and external relays are not included.

Typical Uses

► Security and Surveillance Solutions
► Monitoring of Remote Technical Installations (like water pump stations and wind turbines)
► Container and Vehicle Fleet Monitoring
► Remote Control (of gates for instance)

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