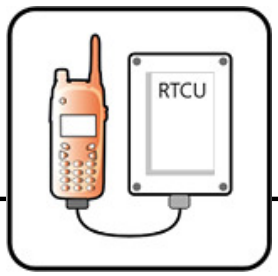
ZONITH

Remote Telemetry and Control Unit



Remote Monitoring and Control via TETRA

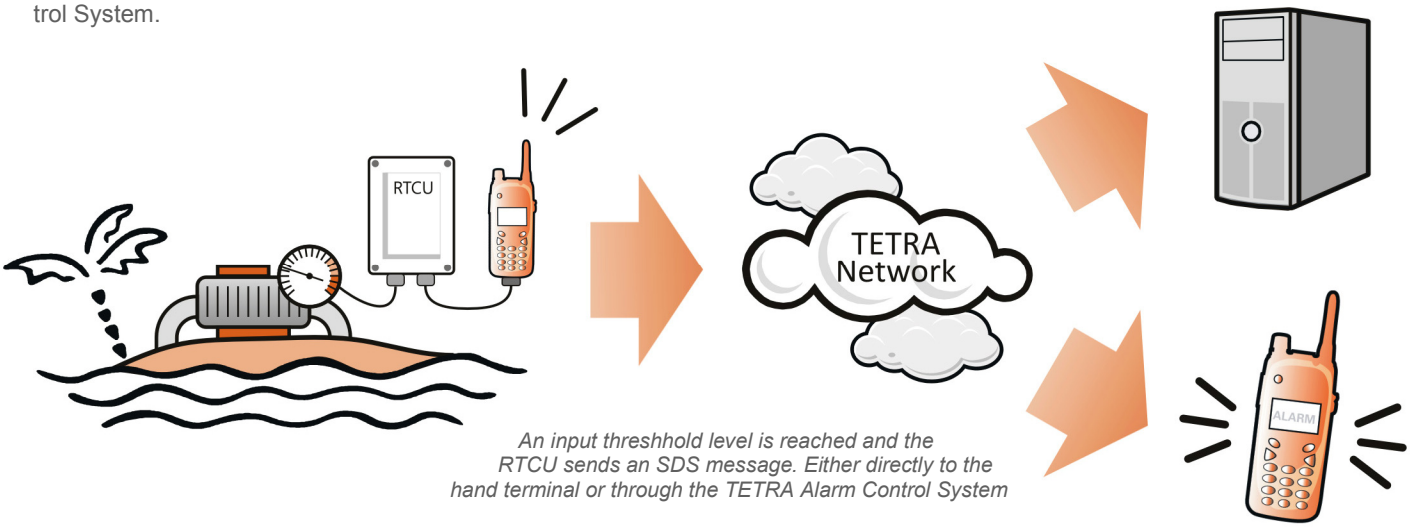
Wireless Monitoring and Control

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

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

Effortless Functionality

The RTCU can send an SDS message when an input contact is activated or when a threshold value for an 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 threshhold level is reached and the RTCU sends an SDS message. Either directly to the hand terminal or through the TETRA 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 monitor and control exposed installations.

Easy SDS Configuration

The RTCU is extremely easy to make operational. Plug it in, connect it to a Sepura or Motorola radio and configure the I/O by SDS-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, TETRA Alarm Control System, will enable rapid response to any problem at remotely located installations. The TETRA 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 is down, and an Alive Check-feature which warns lone workers if the automatic dispatcher is down.

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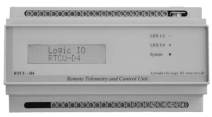
Telemetry Units

Zonith can deliver two different TETRA Telemetry units and one I/O expansion unit as specified in the table below.

Specifications	RTCU A9i	I/O Expansion Unit for RTCU A9i	RTCU D4
Physical Data			
Mounting	Surface Mounting	DIN-rail	DIN-rail
Dimensions (mm.)	W130 x H180 x D50	W157 x H86 x D58	W157 x H86 x D58
Weight	0,88 Kg.	0,3 Kg.	0,3 Kg.
I/O Signals			
Digital Input signals (Low = 0 V, High = 24 V)	4	12	12
Digital Output signals (24 VDC)	0	12	0
Output Relays (230 VAC / 5 A)	4	0	0
Analogue Input (0-5 V)	4	4	4
Analogue Output (0-5 V)	4	4	0
I/O Expandable	Yes	N/A	No
Power Source			
230 VAC supply (build-in AC power unit)	Yes	No	No
Supply via external 24 VDC	Yes	Yes	Yes
Battery Backup (internal)	Option	No	No
Message Type			
SDS using Sepura TETRA radio terminals	Yes	N/A	Yes
SDS using Motorola TETRA radio terminals	Yes	N/A	Yes
SMS using GSM network (build-in modem)	Yes	N/A	No
Failover to SMS in case of failed SDS delivery	Yes	N/A	No
Appearance			

RTCU A9i I/O Expansion Unit

The RTCU A9i can be expanded with up to 5 I/O Expansion Units (shown in table) increasing the number of I/O signals. For instance, the A9i 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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