Hytera

Remote Terminal Unit (RTU)

E-S-S

Application

Wireless Telemetry

Product Name
ESS-RTU-TETRA
ESS-RTU-DMR
ESS-RTU-MPT
ESS-RTU-LAN
ESS-RTU-LTE

Main Features
• Low bandwidth utilization
• Data sending on change of state
• Industrial Linux OS processor

Applicable Products
TETRA, DMR, MPT, LTE

Applicable Technologies
DMR, TETRA, LTE and/or Analog

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Application Description

Reliable wireless equipment management (Monitoring & Control) is essential for process operators to detect any equipment conditions and failures in order to perform corrective measures. Typical problems facing process operators are often the difficult access to the sensors, cable breakage, cable theft and the time to repair the cable.

ESS has designed a Wireless Management System called the ESS-TETRA-RTU (Remote Terminal Unit) that will allow operators to receive instant notification of any sensor or equipment events. Control of maintenance personnel can automatically be informed about the problem and plan effectively for the corrective task.
Various remote analog and digital sensors can be used with a choice of different communication technologies such as MPT1327, DMR, TETRA, LAN and LTE.
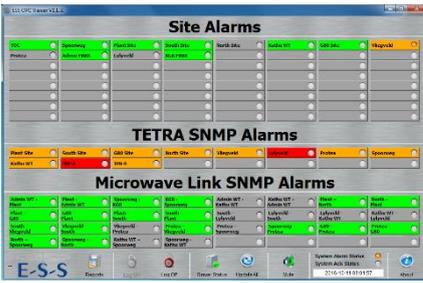
The ESS TETRA-RTU allows for exceptional flexibility and modularity with the ability to provide 100% redundancy for critical management. Connectivity to any OPC (Ole Processing Control) based SCADA is easy to implement. The ESS-RTU has a powerful processor, clever algorithms are implemented by ESS to remove unnecessary data overheads without changing the bus protocols.

The ESS-RTU can be connected to an external TETRA/MPT/DMR/LTE radio's. Various RTU configurations are possible and additional extender interfaces can be connected to the ESS-RTU, allowing for flexible expandability.

OPC Viewer

Trending reports: Digital Inputs

Site Monitoring & Control

Features

Low data bandwidth utilization due to optimized application layer protocol

- Industrial microprocessor, operating system Linux
- 2 x RS232 ports, 1 x RS485 port, 1 x diagnostic RS232 port
- Ethernet port 10/100 Mbps
- 2 USB ports
- Compact DIN rail design with plug-in IO connectors
- Audio connector for external speaker microphone
- On board SD card enabling the user download of configuration files
- DC Voltage inputs from 8 V to 48 VDC
- Operational Temperature -20° to +60°C
- Logic Control via user friendly interface (optional)
- 4 Digital optically isolated inputs, 4 Digital open collector Outputs or
- 20 Digital optically isolated inputs, 8 Digital open collector Outputs
- 4 analogue inputs 0/4 – 20 mA, instrumentation 12-bit A/D
- Efficient LED display of IO's including analogue values
- The ESS-RTU has been certified by Hytera Mobilfunk GmbH for radio to radio communication and radio the ACAPI gateway connectivity.
- SNMP connection for the Accessnet TETRA system
- OPC Interface for connection to SCADA systems
- Gateway connection to GSM

ESS Intelligent TETRA Gateway

Hytera ACAPI

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