

Keystone's Remote Site Management System: A modular approach to site monitoring

Keystone Electronic Solutions' Remote Site Monitoring System (RSM) delivers intelligent site management through the use of Internet of Things functionality

The RSM is a scalable remote site management solution specifically targeted at unmanned distributed infrastructure. With its modular design, the system can be tailored and be deployed in a number of configurations which suits all site management requirements.

The RSM also harnesses the built-in management and monitoring capabilities offered by existing on-site

equipment. This is achieved by interfacing to these devices via standard management protocols such as SNMP, DLMS and Modbus amongst others.

Thus Keystone's RSM solution interfaces seamlessly to elements such as rectifiers, network equipment, Smart Power meters, Genset controllers, inverters and PLCs, which can be monitored over LAN or RS485.

Scalability | Integration | Control applications Installation & Maintenance | Networking capabilities

Scalability:

Keystone's RSM is designed in a modular way which enables organisations to start off with an RSM system with a number of controllers and interfaces that suits their requirements, while offering them the

flexibility to expand these as needed.

Using a selection of stand-alone IO units, it is possible to build a system that can satisfy any site configuration.

Platform Integration:

The on-site RSM controller easily integrates with a variety of equipment using standard management and industrial protocols such as SNMP, MODBUS, DLMS and more.

We also integrate with management frameworks by providing all information on an open REST API. With this API we can integrate with management and reporting platforms

Control Applications:

There is a wide variety of control applications which can be selected, installed, and activated remotely, enhancing controller functionality as required by the environment.

Control services that are already available include a logic engine, climate control, access management, and video surveillance, amongst others.

Installation & Maintenance:

All connectors are either screw terminal or RJ type connectors, greatly reducing the number of tools needed by an installation technician and facilitating faster installations.

All configuration and commissioning is done through a web interface, which can be accessed either through any of the LAN ports, USB port (enumerated as an Ethernet connection) or the WAN port.

This means that the configuration site is also accessible from the central management location. Site configuration can be updated and applied remotely.

All configuration settings can be accessed via an Android application connected through Bluetooth or the mobile device's WAN or Wi-Fi.

Network Capabilities:

The RSM equipment can act as an IP Gateway router for a site. This allows for boiler plate LAN setups on all sites with only the gateway IP address to be assigned

The 4 LAN and 1 WAN Ethernet ports can be used to either route a single port or an entire IP address through to the on-site LAN. Any combination of these two configurations are supported concurrently.

RSM provide for NMS backhaul either over WAN Ethernet or on-board GSM. OpenVPN connectivity is also available for secure backhaul via public networks.

The RSM controller has access to the full capabilities of Linux routing and network functionality and can thus be deployed in many networking roles.

About Keystone Electronic Solutions

Keystone Electronic Solutions is an electronics research and development company, offering organisations the opportunity to outsource their design and product requirements to a highly skilled team of electronic engineers.

The company's team of experts is able to create new and innovative ways of creating electronic products, making use of the best available technology and maximising efficiencies to substantially reduce manufacturing and implementation costs. Their expertise includes both electronics and IT hardware and software, enabling them to develop a total solution for their clients' product creation, as well as integrating the

resulting product into any existing manufacturing or IT environment.

Founded in 2007 by two Directors, John Eigelaar and Ivan Popov, Keystone provides local support and design updates to clients, resulting in quick turnaround time, cost savings and reduce the time to market.

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