Remote Monitoring and Maintenance Services

For Broadcast Sites

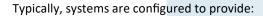
Jaggard provides remote monitoring and maintenance services to terrestrial broadcasters, site owners and operators.

WHAT IS REMOTE MONITORING?

Remote Monitoring is implemented by connecting IP addressable equipment to a network to enable the utilisation of the equipment's SNMP MIBS. Equipment with GPIO monitoring and analogue sensors can also be connected. The networked system then enables users to view, manage, and interact with their transmission equipment from a remote location. This is ideal for broadcasters allowing for real time visibility and interaction with critical equipment without the need for site visits or a permanent manned presence.

Installed at each site, Davicom's Cortex hardware is a powerful SNMP, GPIO, Modbus and analogue sensor manager/agent that interfaces seamlessly with virtually any type of equipment that has remote monitoring functionality. For multiple site monitoring, data is sent via secure VPN tunnels to a dedicated Network Management System (NMS) at a centralised location of the client's choosing.

For single site monitoring, users can directly login to the site Cortex unit via VPN.



- Remote access to GUI equipment browsers.
- Remote interfacing and control of transmitters and transmitter
 N+1 configurations.
- Block System overview showing transmission system configuration and alarm status.
- Alarms & Status monitoring of internal and external environment (Temp, humidity, AC Function, lightning proximity, etc.).
- Alarms & Status Monitoring of Antenna sytems (forward/ reflected powers, high/low pressure, etc.).
- Alarms & Status Monitoring of Program Input Equipment.
- Monitoring and recording of alarm notifications.
- Real time alarm/status notifications, via email and SMS, to assigned personnel.
- Automatically generated system summary reports.







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ADVANTAGES

Reduces operational costs of manned sites and site visits.

24/7 monitoring and alarm capability (via email, pages, voice alerts, or SMS text messages) helps identify issues before critical failure or disruption.

Reduces equipment downtime and improves reliability.

Scalable - Single site or multiple sites.

Independent, system-generated reports can evidence 'on-air' time to client's and advertisers.



MONITORING & MAINTENANCE SLA'S

Jaggard is pleased to offer customised Service Level Agreements for broadcasters, incorporating -

- Supply & Installation of monitoring hardware and sensors.
- Management of VPN services.
- Management of NMS services.
- Dedicated Broadcast Engineers for diagnosis, consultancy, emergency call outs and scheduled maintenance.
- Inspection and maintenance of transmitters and transmission equipment.
- Inspection and maintenance of high powered antenna systems.
- Structural inspections and maintenance of antenna masts and towers.

