

COMPASS

Monitoring and Controlling Remote Sites More Effectively

KRATOS



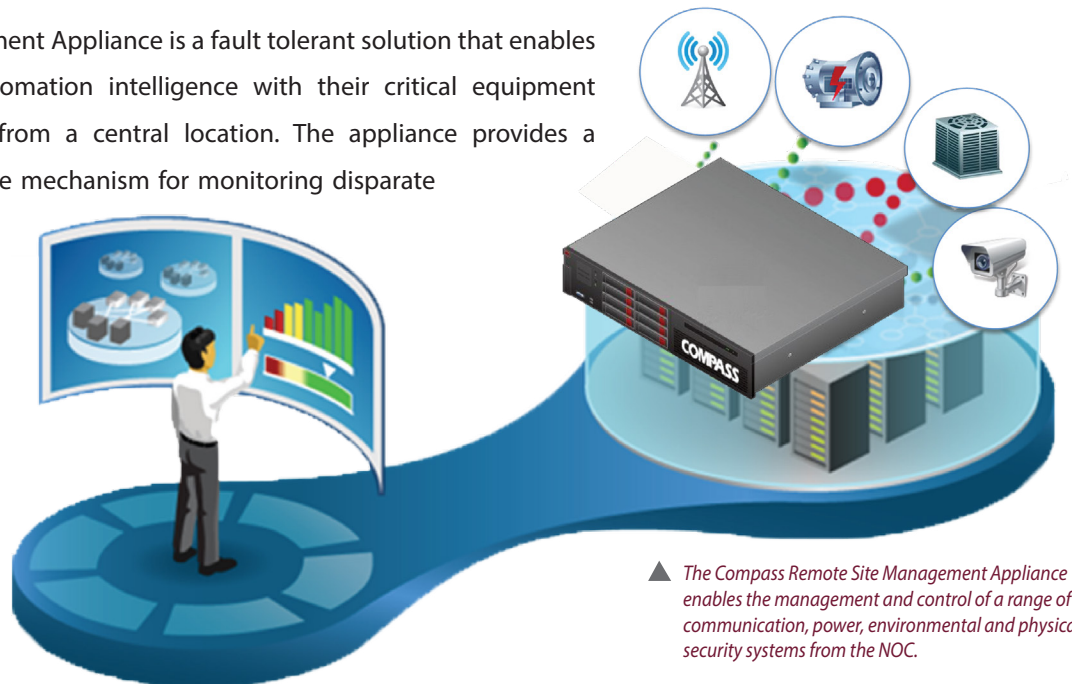
Long distances, restricted accessibility, harsh climates, lack of infrastructure, few technical personnel and limited communications are some of the major hurdles operators face when trying to manage remote sites. When outages occur or performance begins to degrade, site visits quickly add unnecessary high support costs to the management of the network.

To address the challenges of managing remote sites with capabilities that lower support costs and increase uptime, Kratos delivers its Compass® Remote Site Management Appliance. The proven solution has been deployed in thousands of installations worldwide and can automate as much as 70% of routine network maintenance functions and helps resolve issues at remote locations much faster.

The Compass Remote Site Management Appliance is a fault tolerant solution that enables organizations to deploy local automation intelligence with their critical equipment to remotely manage these sites from a central location. The appliance provides a compact, efficient and cost effective mechanism for monitoring disparate communication equipment and facility support systems at remote sites. It is an ideal solution for managing remote satellite terminals, microwave towers, TV transmission towers, gas and oil pumping stations, maritime applications, branch offices and more.

Compass Remote Site Management

- *Resolves issues at remote locations faster and reduces site visits*
- *Automates as much as 70% of routine network maintenance*
- *Detects and fixes problems in seconds*



▲ *The Compass Remote Site Management Appliance enables the management and control of a range of communication, power, environmental and physical security systems from the NOC.*

Manage Remote Sites More Effectively

Lower Costs - Reduce the number of site visits by automating the recovery from problems

Improve Quality of Service - Gain complete visibility into all aspects of the remote site to proactively address problems before service is affected

Automate Remediation - Identify and fix remote issues automatically without having to deploy costly on-site resources

Comprehensive Remote Management - Leverage advanced local management capabilities for a range of systems including communications, power, environmental and physical security equipment

Centralize Management - Manage remote sites from the Network Operations Center (NOC) using the NeuralStar Network Management System (NMS) or Compass monitor and control software

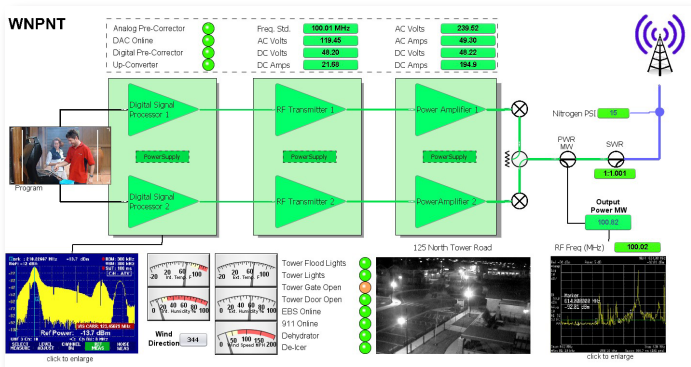
Simplify Configuration - Enable operators to remotely reconfigure and activate new services reliably and accurately

Increase Scalability and Distribution - Scale and manage large quantities of equipment with heterogeneous interfaces

Increase Redundancy - Leverage redundant hardware and a high availability architecture that enables one appliance to take over if another fails

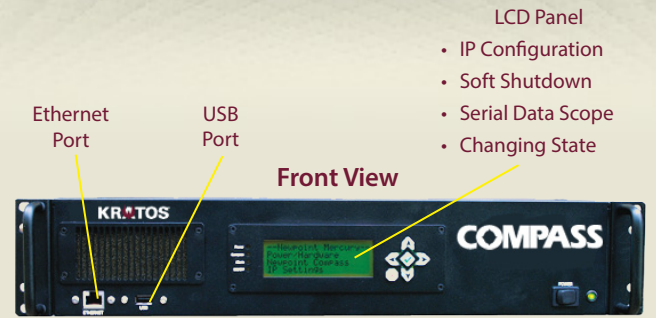
Enhance Security - Use a secure remote management platform that ensures compliance with internal management policies

Ensure Control - Provide a primary and up to eight back-up communication links to the NOC



▲ With the appliance installed at a remote site, Compass manages a range of systems at the local site.

System View



- Modular Power Bay
 - AC and DC
 - Redundant AC Option
- Ethernet Port
- Four Modular Bays
 - Serial, Ethernet or Contact Closure
 - Multitude of Expansion Bay Options
- Inside
 - Controller Board
 - Mother Board
 - RAID Option
 - SSD Option
 - UPS Option

System Specifications

State of the Art Components:

- Intel Atom 1.6GHz Dual Core Processor
- 32GB Solid State SATA drives with over 100 years MTBF
- One additional internal SATA port
- Optional: DR RAID Technology
- Optional: Internal UPS battery backup with configurable auto shutdown

System:

- Rack or self-top mounting
- Full 2U with interior options using four expansion bays
- Two front fans and one rear fan – only moving parts
- 2x GB Ethernet (auto switching 10/100/1000) ports on front and back for easy access
- Front LCD display for basic configuration and status, network set-up and serial port configuration

Power:

- 24-48 VDC power supply
- 90-240 VAC power supply
- Redundant power supply option
- Internal UPS option

Modular Bay Options:

- RJ45 or DB9 serial ports
- 8 or 16 ports per bay (up to 64 ports)
- Four configurable bays
- Mix and match modules for architecture

Operating Environment:

- Operating temp: 0°- 60° C (32~122° F)
- Operating humidity: 40°C @85% RH (Non-condensing)
- Non-Operating temp: -10°-60°C
- Non-Operating humidity: 40°C@90% RH (Non-condensing)