VIAVI

Front

Status Indicators — LCD Display — Menu Nav & Select Buttons — SIMs

Antenna Ports — Landline Connectors — Serial Interface — USB Port — Mini Hub — IP Network Interface

Back

RCATS® RTP – iDEN

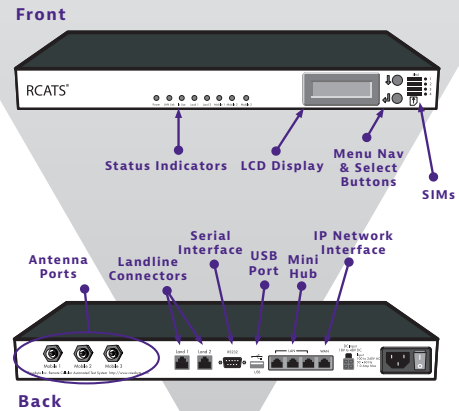**NetComplete® Service Assurance Solutions Portfolio**

The RCATS RTP – iDEN (Remote Test Probe) enables wireless service providers to actively monitor and improve the quality of services they deliver to their end customers.

The RTP tests voice, data and messaging services within iDEN networks. It is a self contained, rack-mountable unit that can be deployed throughout the network. The RTP is remotely accessed and controlled through the Web-based QoSExecutive or telnet over Ethernet, dialup or serial port.

The RTP is a rugged, embedded platform capable of supporting multiple RCATS Service Validation Packages (SVPs), such as Basic Voice, Basic Data, Supplementary Services, SMS, WAP and others. This enables operators to target the specific services they wish to monitor upon deployment and provides the flexibility to add new services to existing RTPs already deployed in the field.

The RTP is part of the patented Viavi Solutions RCATS solution, which provides automated testing, centralized management and aggregated reporting for large numbers of deployed probes. The solution allows wireless operators to access real-time, network-wide performance and availability information, enabling them to use this information to increase service quality, increase revenue and reduce costs.

Wireless operators face enormous pressure to attract and retain subscribers through new service offerings and improved network quality. Viavi, the leader in end-to-end service quality monitoring solutions for wireless networks, has specifically designed the turn-key RCATS solutions for large-scale, carrier-grade deployments worldwide.

Key Features

- Tests multiple services from an end-user perspective
- Rugged, embedded platform for remote location operation, supports downloadable remote software upgrades, and rack-mounted installation
- Secure access and control via Web-based QoSExecutive or telnet over Ethernet, dialup, or serial port
- Embedded DSP platform generates/detects DTMF tone; generates/records local voice; and supports voice quality measurements, interactive voice response (IVR), and streaming media, including VoIP
- Interactive mode for network development and troubleshooting
- Front panel includes easy-to-use menu buttons and LCD for local configuration
- Distributed architecture scales across hundreds of geographically dispersed locations

KeyBenefits

- Increases customer satisfaction by detecting customer-impacting problems quicker
- Reduces operating cost by automating monitoring, testing, and reporting
- Increases operator visibility of service quality by providing network-wide, real-time reporting of measurements and key performance indicators (KPIs)
- Improves customer experience consistency by performing a common test set throughout the entire network footprint
- Reduces the time and risk to install or modify network infrastructure by providing extensive recursive testing capability
- Increased revenue and reduced churn through positive customer satisfaction

Service Specifications

Frequency Band
iDEN 800/900 MHz

Voice Services
VSELP vocoder
PTT
DTMF

Data Services
Up to 64 kbps

Technical Specifications

Power Requirements	
AC 100 to 240 V, 50/60 Hz	
Power consumption	45 W (max)

Physical	
Size (H x W x D)	1U form factor 47.625 x 428.625 x 254 mm (1.875 x 16.875 x 10.0 in)
Weight	3.175 kg; 7 lbs
Mounting	19" or 23" rack mounts (23" option)

Environmental	
Operating temperature	0 to 50°C; 32 to 122°F
Relative humidity	8% to 80%, noncondensing

interfaces
2 antenna connectors (SMA)
1 Ethernet port (RJ45; 10/100 BaseT) (WAN)
3 Additional Ethernet ports reserved for future use (LAN)
1 Serial port for terminal or dialup modem (DB-9; RS232)
1 USB port (for future use)
4 local SIM card ports (5 V, 3.3 V, and 1.8 V support)
2 telephone connectors (RJ11)

Signal Reception	
Remotely-mounted, high-gain antennas	
Recommended signal strength	−80 dBm or better

Manageability
Web-based access/control via QoSExecutive
Telnet access/control via Ethernet
Interactive mode for network development and troubleshooting
Downloadable remote software upgrades
Easy-to-use front-panel buttons and LED display for local configuration

Reliability
Rugged, embedded form factor with optional rack mounts
No moving parts such as fans or disk drives
Fail-safe watchdog reset timer for lights-out resiliency
Embedded operating system with purpose-built drivers

Support and Warranty
One-year return-to-factory hardware warranty excluding phone modules
90-day software warranty
Web-based support and toll-free customer hotline support
Optional hardware and software extended warranty coverage

Solution Requirements and Options

Required RCATS Solution Components
RCATS Remote Test Probes
QoSExecutive
QoSManager
Optional: Mobile Identity Server (centralized SIM repository)
Optional: Mobile Identity Server Controller

RCATS Remote Test Probes
RCATS RTP – GPRS/GSM
RCATS RTP – EDGE/GPRS/GSM
RCATS RTP – HSDPA/EDGE/GPRS/GSM
RCATS RTP – 1xEV-DO Rev. 0/1xRTT
RCATS RTP – 1xEV-DO Rev. A/1xRTT
RCATS RTP – iDEN

RCATS Managed Services
RCATS RoamerNet

RCATS Service Validation Packages (SVPs)
RCATS SVP – Basic Voice
RCATS SVP – Supplementary Services
RCATS SVP – Basic Data
RCATS SVP – WAP
RCATS SVP – SMS
RCATS SVP – MMS
RCATS SVP – Voice Quality
RCATS SVP – IVR