

## Subscriber Unit SU123 MIMO

**802.11n 2x2 MIMO Subscriber Unit is designed for high-density deployments requiring maximum capacity.**

The SU123 MIMO is an Carrier Grade class 802.11n Outdoor Subscriber Unit designed for high density deployments that emphasize throughput capacity over coverage including those supporting VoIP and High Speed Internet.

### Connectivity and Power Options

The SU123 features one 10/100 Ethernet port operating in auto-negotiation mode in order to seamlessly adapt to the Ethernet infrastructure.

### Backward Compatibility

To protect the customer's investment in legacy Repeatit Base Stations, and to ease the transition to 802.11n, the SU123 is backwards compatible with legacy Repeatit 802.11a Base Stations in 5 GHz bands.

### Scalability

As part of the RCS Management System, the SU123 has full support of the RCS features including, bandwidth control, traffic storage in database, remote Repeatit SU management and many more.

### RF Management

The SU123 is also hardware ready to support WLAN spectrum management to ensure higher air quality for efficient and high performance wireless access services. This capability not only ensures detection of common RF interferers but also allows appropriate corrective actions to mitigate loss of performance due to interference. As the unlicensed WLAN spectrum gets more crowded, detecting and avoiding RF interference becomes more important. Spectrum management is one of several services needed to enable and enforce SLAs for VoWLAN and other mission-critical applications.

### Easy Installation

The SU123 is shipped with a flexible mounting kit designed for pole-mounted, and wallmounted deployment. The units follow the Repeatit tradition of easy installation.



### Product Highlights

- 300 Mbps radio speed, 140MBps aggregated net throughput
- 10/100 BaseT Ethernet port
- Supporting 20 and 40 MHz channel widths
- Build-in RF ESD/Surge protection up to 15 kV
- Security: 64 and 128 bit WEP encryption, WPA, WPA2 with TKIP or CCMP/AES Chiper

### Functional specification

#### Subscriber Unit

NAT router and transparent bridge modes

VLAN, in routing mode tagging and untagging of one VLAN. In bridge mode 100% transparent.

Mgmt IP address, supports unique mgmt IP for Network owner.

Advanced spectrum analyser

QoS: Four traffic classes prioritise traffic

#### Subscriber Unit with RCS Management Software

Bandwidth management

Traffic storage in database

Remote Repeatit SU management



## SU123 MIMO

### Radio

Frequency Bands	5.150 – 5.845 GHz
Protocol	802.11AN
Channel widths supported	20/40 MHz
Capacity	140 Mbps
Modulation	OFDM, BPSK/QPSK/16QAM/64QAM
Max Tx Power	23 dBm
Max Rx sensitivity	-97 dBm
Error Correction	FEC; k=1/2, 2/3, 3/4, 5/6
Encryption	64 and 128 bit WEP encryption, WPA, WPA2 with TKIP or CCMP/AES Chiper
Surge Protection	15kV
Antenna Protection	Internal DC Grounding
DFS	Yes
QoS	Four Access Categories (AC) Voice, Video, Best Effort, and Background Traffic classification according to WMM

### Internal Antenna

Gain	typ. 23 dBi
VSWR	max. 1.5:1
3 dB Beam-Width, H-Plane	7°
3 dB Beam-Width, V-Plane	7°
Polarization	Horizontal and Vertical
Connector	N/A
Antenna Cable	N/A

### Ethernet Interface

Type	10/100BaseT Interface with Auto-negotiation (IEEE 802.3)
Number of Ethernet Ports	1
Framing/Coding	IEEE 802.3u
Traffic Handling	MAC layer bridging, self learning, 802.1q transparent
VLAN ID for Management	Supported
Power over Ethernet	48V DC, 802.3af, <6W typical
Connector	RJ-45

### Management

Management	Web interface
NMS Application	RCS (Repeatit NMS)
Tools in web interface	Spectrum Analyser

### Environment

IP Code	IP65
Temperature	-40° / +55° C
Size	370 x 370 x 40 mm
Weight per unit	2.7 Kg

