

Subscriber Unit SU100 MIMO Series

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

The SU100 MIMO Series 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 SU100 MIMO Series 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 SU100 MIMO Series is backwards compatible with legacy Repeatit 802.11a Base Stations in 5 GHz bands.

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

Scalability

As part of the RCS Management System, the SU100 MIMO Series has full support of the RCS features including, bandwidth control, traffic storage in database, remote Repeatit SU management and many more.

RF Management

The SU100 MIMO Series 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 SU100 MIMO Series is shipped with a flexible mounting kit designed for pole-mounted, and wallmounted deployment. The units follow the Repeatit tradition of easy installation.



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





| | SU116 MIMO | SU123 MIMO | SU100 MIMO |
|---------------------------|--|--|--|
| Radio | | | |
| Frequency Bands | 5.150 – 5.845 GHz | 5.150 – 5.845 GHz | 5.150–5.845 GHz |
| Protocol | 802.11AN | 802.11AN | 802.11AN |
| Channel widths supported | 20/40 MHz | 20/40 MHz | 20/40 MHz |
| Capacity | 140 Mbps | 140 Mbps | 140 Mbps |
| Modulation | OFDM BPSK/QPSK/16QAM/64QAM | OFDM, BPSK/QPSK/16QAM/64QAM | OFDM PSK/QPSK/16QAM/64QAM |
| Max Tx Power | 23 dBm | 23 dBm | 23 dBm |
| Max Rx sensitivity | -97 dBm | -97 dBm | -97 dBm |
| Error Correction | FEC; k=1/2, 2/3, 3/4, 5/6 | FEC; k=1/2, 2/3, 3/4, 5/6 | 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 | 64 and 128 bit WEP encryption, WPA , WPA2 with TKIP or CCMP/AES Chiper | 64 and 128 bit WEP encryption, WPA , WPA2 with TKIP or CCMP/AES Chiper |
| Surge Protection | 15kV | 15kV | 15kV |
| Antenna Protection | Internal DC Grounding | Internal DC Grounding | Internal DC Grounding |
| DFS | Yes | Yes | Yes |
| QoS | Four Access Categories (AC) Voice, Video, Best Effort, and Background Traffic classification according to WMM | Four Access Categories (AC) Voice, Video, Best Effort, and Background Traffic classification according to WMM | Four Access Categories (AC) Voice, Video, Best Effort, and Background Traffic classification according to WMM |
| Internal Antenna | | | External Antenna |
| Gain | typ. 16 dBi | typ. 23 dBi | |
| VSWR | max. 1.5:1 | max. 1.5:1 | |
| 3 dB Beam-Width, H-Plane | typ. 17° | 7° | |
| 3 dB Beam-Width, V-Plane | typ. 17° | 7° | |
| Polarization | Horizontal and Vertical | Horizontal and Vertical | |
| Connector | N/A | N/A | N female |
| Antenna Cable | N/A | N/A | |
| Ethernet Interface | | | |
| Type | 10/100BaseT Interface with Auto-negotiation (IEEE 802.3) | 10/100BaseT Interface with Auto-negotiation (IEEE 802.3) | 10/100BaseT Interface with Auto-negotiation (IEEE 802.3) |
| Number of Ethernet Ports | 1 | 1 | 1 |
| Framing/Coding | IEEE 802.3u | IEEE 802.3u | IEEE 802.3u |
| Traffic Handling | MAC layer bridging, self learning, 802.1q transparent | MAC layer bridging, self learning, 802.1q transparent | MAC layer bridging, self-learning 802.1q transparent |
| VLAN ID for Management | Supported | Supported | Supported |
| Power over Ethernet | 48V DC, 802.3af, <6W typical | 48V DC, 802.3af, <6W typical | 48V DC, 802.3af, <6W typical |
| Connector | RJ-45 | RJ-45 | RJ-45 |
| Management | | | |
| Management | Web interface | Web interface | Web interface |
| NMS Application | RCS (Repeatit NMS) | RCS (Repeatit NMS) | RCS (Repeatit NMS) |
| Tools in web interface | Spectrum Analyser | Spectrum Analyser | Spectrum Analyser |
| Environment | | | |
| IP Code | IP63 | IP65 | IP67 |
| Temperature | -40° / +55° C | -40° / +55° C | -40° / +55° C |
| Size | 250 x 210 x 80 mm | 370 x 370 x 40 mm | 284 x 174 x 81 mm |
| Weight per unit | 1.1 Kg | 2.7 Kg | 2.0 Kg |

