

Base Station BS340 and BS342 MIMO

BS340 is a single radio 802.11n 2x2 MIMO Base Station with an integrated 14 dBi Dual polarized antenna. The BS342 Base Station adds an extra radio interface with dual N-type connectors for better coverage with an external antenna. BS340 and BS342 MIMO are designed for high-density deployments requiring maximum capacity.

BS340 and BS342 MIMO are Carrier Grade class 802.11n Outdoor Base Stations designed for high density deployments that emphasize throughput capacity over coverage including those supporting VoIP and High Speed Internet. With the 14 dBi built-in internal antenna, the BS340 MIMO continues the tradition of Repeatit leadership in efficient internal antenna support. With the extra radio interface on the BS342 MIMO, even better coverage can be achieved by adding an external Dual polarized antenna.

Connectivity and Power Options

The BS340 and BS342 MIMO feature one 10/100/1000 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 clients, and to ease the transition to 802.11n, the BS340 and BS342 MIMO are backwards compatible with legacy Repeatit 802.11a clients in 5 GHz bands.

Scalability

As part of the RCS Management System, the BS340 and BS342 MIMO have full support of the RCS features including, bandwidth control, firewall, traffic storage in database, remote Repeatit SU management and many more.

Product Highlights

- 300 Mbps radio speed, 180Mbps aggregated net throughput
- 10/100/1000 Ethernet port
- 14dBi Dual Polarized 5 GHz antenna
- Supporting 20 and 40 MHz channel widths
- Build-in RF ESD/Surge protection up to 15 kV



RF Management

The BS340 and BS342 MIMO are 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 BS340 and BS342 MIMO ship with a flexible mounting kit designed for pole-mounted and wallmounted deployment.

The BS340 and BS342 MIMO follow the Repeatit tradition of easy installation. Centralized management limits the configuration of the BS to only network settings.



Functional specification

Base Station

Level 2-switch
Native VLAN
64 and 128 bit WEP encryption, WPA, WPA2 with TKIP or CCMP/AES Chipset.
Advanced spectrum analyser
QoS: Four traffic classes prioritise traffic

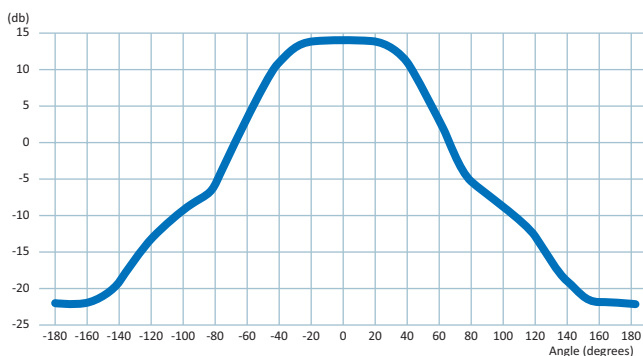
Base Station with RCS Management Software

Firewall functionality
Bandwidth management
Multi SSID
Mac based VLAN according to the standard 802.1Q
Centralized MAC-address filtering
Enhanced Subscriber information
Centralized database for radio traffic history



	BS340 MIMO	BS342 MIMO
Radio	Single radio	Dual radio
Frequency Bands	5.150 – 5.845 GHz	5.150 – 5.845 GHz
Protocol	802.11AN	802.11AN
Channel widths supported	20/40 MHz	20/40 MHz
Capacity	180 Mbps	2x180 Mbps
Modulation	OFDM, BPSK/QPSK/16QAM/64QAM	OFDM, BPSK/QPSK/16QAM/64QAM
Max Tx Power	23 dBm	23 dBm
Max Rx sensitivity	-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
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
Security	RCS and/or MAC level Authentication	RCS and/or MAC level Authentication
Surge Protection	15kV	15kV
Antenna Protection	Internal DC Grounding	Internal DC Grounding
DFS	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
Internal Antenna		
Gain	14 dBi minimum	14 dBi minimum
VSWR	2:1 (max) 1.7:1 (typ)	2:1 (max) 1.7:1 (typ)
Azimuth Beam Width	Port V, 90°(typ) at 11dBi Gain Port H, 90°(typ) at 10dBi Gain	Port V, 90°(typ) at 11dBi Gain Port H, 90°(typ) at 10dBi Gain
3 dB Beam-Width	8° (typ)	8° (typ)
Polarization	Dual Linear Vertical + Horizontal	Dual Linear Vertical + Horizontal
Cross polarization	-25dB (typ), -15dB (max)	-25dB (typ), -15dB (max)
F/B Ratio	25 dB (min)	25 dB (min)
Port to port isolation	30dB (min)	30dB (min)
External Antenna		
Connector		2 x N-female (2x2 MIMO)
Ethernet Interface		
Type	10/100/1000BaseT Interface with Auto-negotiation (IEEE 802.3)	10/100/1000BaseT Interface with Auto-negotiation (IEEE 802.3)
Number of Ethernet Ports	1	1
Framing/Coding	IEEE 802.3u	IEEE 802.3u
Traffic Handling	MAC layer bridging, self learning, 802.1q transparent	MAC layer bridging, self learning, 802.1q transparent
VLAN ID for Management	Supported	Supported
Power over Ethernet	48V DC, 802.3af, <6W typical	48V DC, 802.3af, <6W typical
Connector	RJ-45	RJ-45
Management		
Management	Web interface	Web interface
Protocol	SNMP	SNMP
NMS Application	RCS (Repeatit NMS)	RCS (Repeatit NMS)
Tools in web interface	Spectrum Analyser	Spectrum Analyser
Environment		
IP Code	IP65	IP65
Temperature	-40° / +55° C	-40° / +55° C
Size	370 x 370 x 40 mm	370 x 370 x 40 mm
Weight per unit	3.7 Kg	3.7 Kg

Horizontal Port Horizontal Azimuth Beam Width 5.6 GHz



Vertical Port Vertical Azimuth Beam Width 5.6 GHz

