

## Base Station BS120 MIMO

**802.11n 2x2 MIMO Base Station with N-type antenna connectors. BS120 MIMO are designed for high-density deployments requiring maximum capacity.**

The Base Station is a Carrier Grade class 802.11n Outdoor Base Station designed for high density deployments that emphasize throughput capacity over coverage including those supporting VoIP and High Speed Internet.

### Connectivity and Power Options

The Base Station 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 clients, and to ease the transition to 802.11n, the Base Station is backwards compatible with legacy Repeatit 802.11abg clients.

### Scalability

As part of the RCS Management System, the Base Station has 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
- 2x2 MIMO
- 10/100 Ethernet port
- Supporting 20 and 40 MHz channel widths
- Build-in RF ESD/Surge protection up to 15 kV
- Stainless steel and aluminium casing



BS120: 2 x N-female (2x2 MIMO)

### RF Management

The Base Station 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 Base Station ships with a flexible mounting kit designed for pole-mounted, and wallmounted deployment.

The Base Station follows 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



## BS120-N5/BS120-NX

<b>Radio</b>	Single radio
Capacity	100 Mbps
Encryption	64 and 128 bit WEP encryption, WPA , WPA2 with TKIP or CCMP/AES Chiper
DFS	Yes
QoS	Four Access Categories (AC) Voice, Video, Best Effort, and Background Traffic classification according to WMM
<b>External Antenna</b>	
Connector	2 x N-female (2x2 MIMO)
<b>Ethernet Interface</b>	
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
<b>Management</b>	
Management Protocol	Web interface
NMS Application	SNMP
Tools in web interface	RCS (Repeatit NMS) Spectrum Analyser
<b>Environment</b>	
IP Code	IP65
Temperature	-40° / +55° C
Size	370 x 370 x 40 mm
Weight per unit	3.7 Kg

### Carrier Grade – N5

### Standard – NX

	Carrier Grade – N5	Standard – NX
<b>Radio Choice</b>		
Speed	UP TO 300Mbps physical data rates	UP TO 300Mbps physical data rates
Frequency Bands	5,150–5,845 GHz	5,150–5,845 GHz 2,412–2,472 GHz
Modulation Techniques	OFDM: BPSK, QPSK, 16-QAM, 64-QAM	OFDM: BPSK, QPSK, 16QAM, 64QAM DSSS: DBPSK, DQPSK, CCK
Surge Protection	±15kV, Internal DC-Grounding	±5kV, External DC-Grounding
<b>Output Power</b>		
5GHz HT20	23dBm @MCS0 17dBm @MCS7	18dBm @MCS0 12dBm @MCS7
5GHz HT40	21dBm @MCS0 14dBm @MCS7	16,5dBm @MCS0 9dBm @MCS7
802.11a	23dBm@6-24Mbps 22dBm@36Mbps 21dBm@48Mbps 20dBm@54Mbps	18dBm@6-24Mbps 18dBm@36Mbps 17dBm@48Mbps 16dBm@54Mbps
2.4GHz HT20		18dBm @MCS0 15dBm @MCS7
2.4GHz HT40		18dBm @MCS0 14,5dBm @MCS7
802.11g		20dBm@6-24Mbps 19,5dBm@36Mbps 18,5dBm@48Mbps 17dBm@54Mbps
802.11b		20dBm@1-11Mbps
<b>Receiver Sensitivity</b>		
5GHz HT20	-97dBm @MCS0 -77dBm @MCS7	-93dBm @MCS0 -74dBm @MCS7
5GHz HT40	-92dBm @MCS0 -74dBm @MCS7	-90dBm @MCS0 -72dBm @MCS7
802.11a	-97dBm@6Mbps -80dBm@54Mbps	-94dBm@6Mbps -77dBm@54Mbps
2.4GHz HT20		-93dBm @MCS0 -74dBm @MCS7
2.4GHz HT40		-90dBm @MCS0 -72dBm @MCS7
802.11g		-94dBm@6Mbps -78dBm@54Mbps
802.11b		-94dBm@1-11Mbps

