

Description

BX 203 duplex band selective repeater is ideal for distributed gain architecture.

Distributed gain architecture is suitable for large buildings or underground areas and tunnels for much better system radio parameters (i.e. noise and power output level for more carriers) than offered in one gain-concentrating repeater.

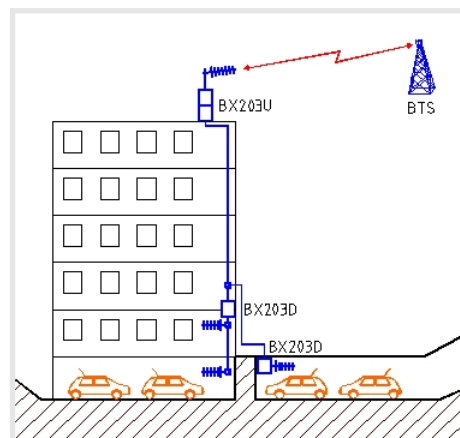
Such architecture usually consists of one repeater type BX 203U (master), which is located near the outdoor antenna, and one or more repeaters type BX 203D (slave) located near the radiating cable input, or indoor antennas. Repeaters are connected by coaxial cable up to 20 dB attenuation.

The system can be equipped with back-up power supply and with remote monitoring facility.



Remote monitoring provides continuous remote monitoring of essential repeater(s) parameters within the GSM operator coverage.

The repeater allows operative testing of activity of amplifiers, active electronic filters, supply voltage failure, power amplifier (PA) temperature, unauthorized entering into cabinet, and backup power supply monitoring. PA – stages can be remotely switched On/Off.



Monitoring system is delivered in two versions:

The Operational and Maintenance Center – OMC version: The status of one or a group of repeaters is displayed on desktop computer in remote monitoring center. Service staff is notified of changes in the stage of the repeaters, and able to provide preventive maintenance interventions into the system before fault occurs. Also the alarm message of system failure can be sent to any workplace by E-mail or in the form of SMS message.

Simplified remote monitoring version: Convenient for individual repeater testing, notifies the status only by SMS message with brief fault description.





Technical Specifications

Type		BX 203U	BX 203D
Frequency range	MHz	380 ÷ 470 (see note)	
Bandwidth	MHz	1–5 (adjustable)	
Modulation		analog / digital	
DL gain	dB	25 ÷ 47 (adjustable)	33
UL gain	dB	33	25 ÷ 47 (adjustable)
Gain adjustment		manual / automatic (ALC)	
DL output power (for one carrier)	dBm	+15 max.	+27
DL output power (for several carriers)	dBm	+10 max. for each carrier	+22 for each carrier
UL output power (for one carrier)	dBm	+27	+15 max.
UL output power (for several carriers)	dBm	+22 for each carrier	+10 max. for each carrier
VSWR		< 1.3	
Impedance	Ω	50	
AC power supply and back up		see table Power packs	
Power supply	V / A	24 / 4 DC	
Ingress protection		IP 54	
Operating temperature	°C	-25 ÷ +55	
Dimensions w × h × d	mm	420 × 545 × 210	
Weight	kg	max. 29	
Connectors type		N female	

Note: On customer's requirement BX 203 repeater can be set up to different operating band frequencies, such as:

- **TETRAPOL / TETRA:** 380÷385 MHz, 390÷395 MHz, 410÷415 MHz, 420÷425 MHz
- other, if requested

Power packs (optional)

Type		BZ 203
Model		power pack, not backed up
Input	V / A	230 / 0.7 AC
Output voltage / current	V / A	24 / 5 DC
Ingress protection		IP 54
Operating temperature	°C	-25 ÷ +55
Dimensions w × h × d	mm	380 × 380 × 210
Weight	kg	13

Type		BZ 105
Model		power pack, backed up
Input	V / A	230 / 0.7 AC
Output voltage / current	V / A	24 / 5 DC
Back up time at load 4 A	hour	4.5
Ingress protection		IP 54
Operating temperature	°C	-25 ÷ +55
Dimensions w × h × d	mm	350 × 700 × 240
Weight	kg	52