MikroTik

InterCell series

LTE base station and client solutions

The MikroTik InterCell base station devices give you the ability to quickly expand an existing LTE solution, or even launch a new LTE mobile operator without the usual expense, infrastructure and size requirements.

The InterCell outdoor device series includes several models, choose the best option depending on the required frequency band configuration. The devices support output power of up to 10W, providing city-wide coverage.

The new InterCell series by MikroTik are small LTE base stations which support up to 192 LTE client devices each. This is a perfect low-cost solution for ISPs, mobile operators and other businesses, that need to provide internet connectivity using LTE standard.

The units have features such as -48V telecom powering, dual SFP ports, dual Gigabit Ethernet ports, a built-in lightning arrestor and even supports EPC, working completely stand-alone (no central network core required) with up to 256 clients.



LTE base stations	B38 (2x10 W) + B39 (2x10 W)	B38 (2x10 W) + B38 (2x10 W)	B38 (2x10 W)	B39 (2x10 W)
Product name	InterCell 10 B38 + B39	InterCell 10 B38 + B38	InterCell 10 B38	InterCell 10 B39
Cell/band	TDD B38 + B39	TDD B38 + B38	TDD B38	TDD B39
Band frequency	B38: 2570-2620 B39: 1880-1920	B38: 2570-2620	B38: 2570-2620	B39: 1880-1920
Bandwidth	5, 10, 15, 20 MHz			
Mode	Dual carrier		Single carrier	
MIMO	2x2 per cell			
Max throughput per cell	DL 140 Mbps (256QAM, SF2), UL 30 Mbps (64QAM, SF1)			
Max power	2x40 dBm per cell			
Synchronisation	GPS/IEEE 1588v2/NL			
Connected active users	96 per cell			
RRC connected users	192 per cell			
Ports	2 × SFP, 2 × ETH (10/100/1000M)			
Connector	N-Female			
Enclosure	Metal. IP67			
Powering	-48 V DC. PSU included.			
Power consumption	Up to 200 W			
Lightning arrestor	Built in			
Dimensions	400 x 507 x 139 mm, 25 kg			
Built in EPC option	Up to 256 clients			
Software features	Runs special InterCellOS. Supports LIPA, VoLTE			



LTE CPE





LHG LTE kit

The following MikroTik devices are fully compatible with the InterCell series of base stations.

Product code	RBwAPR-2nD&R11e-LTE	RB912R-2nD-LTm&R11e- LTE	RBSXTR&R11e-LTE	RBLHGR&R11e-LTE	
CPU	QCA9531 650 MHz				
Size of RAM	64 MB				
Storage	16 MB Flash				
10/100 Ethernet ports	1		2	1	
Wireless	Built-in 2.4 GHz 802.11b/g/n, dual-chain		-		
Wireless antenna gain	2 dBi	1.5 dBi	-		
GPS	-	Built-in MT3337V, with u.FL RF connector (external antenna required)	-		
LTE antenna gain	2 - 4.5 dBi	3.5 dBi	9 dBi	17 dBi	
Antenna beam width	360°		60°	25°	
LTE category	4 (150 Mbps Downlink, 50 Mbps Uplink)				
3G category	R7 (21 Mbps Downlinks, 5.76 Mbps Uplink)				
2G category	Class12				
SIM slot	1 (Mini SIM)	2 (Mini SIM)	2 (Micro SIM)	1 (Mini SIM)	
PoE in	Yes	Yes	Yes, on Ether1	Yes	
PoE out	-		Yes, on Ether2	-	
Supported input voltage	9 V - 30 V (Passive PoE)	8-30 V (DC jack), 12 - 57 V (Passive PoE, 802.3af/at)	18 - 57 V (Passive PoE, 802.3af/at on Ether1)	12 - 57 V (Passive PoE, 802.3af/at)	
Dimensions	185 x 85 x 30 mm	139 x 77 x 28,5 mm	140 x 140 x 103 mm	391 x 391 x 227 mm	
Operating temperature	-40°C +60°C tested -40°C +70°C tested		-40°C +60°C tested		
Operating system	RouterOS, level 4	RouterOS, level 4	RouterOS , level 3	RouterOS, level 3	
Max power consumption	8 W	9 W	6 W	6 W	

R11e-LTE

LTE (FDD) bands	1/2/3/7/8/20 (2100/1900/1800/2600/900/800)
LTE (TDD) bands	38/40 (2600/2300)
3G bands	1/2/5/8 (2100/1900/800/900)
2G bands	2/3/5/8 (1900/1800/800/900)