

ICS-201: Dual Band ICS Repeater

MORELINK® ICS-201 repeaters are the best choice dual-band coverage solutions to quickly provide multi-mode mobile services in small to medium sized indoor areas such as houses, hotels, hot spots, shops, offices, meeting rooms, apartments, and so on. Advanced Adaptive Echo Interference Cancellation technology with MORELINK® Cognitive Auto Level Control scheme make ICS-201 able to adapt to time-variant isolation environment so as to provide optimized signal coverage all the time. With optional external antennas and one software programmable Sub-Block per band, ICS-201 can be applied for diverse scenarios in the field

Significant Features

- Dual Band Design with One Dual Band Repeater Module
- LTE FDD Supported
- 17±1 dBm of Maximum Output Power
- 75 dB of Maximum Gain
- One Sub-Block Per Band with Programmable Frequency and Bandwidth
- Plug-and-Play (PnP) with Built-in Donor and Service Antennas
- Adaptive Echo Interference Cancellation to Increase at Least 30dB of Isolation
- Light Weight and Reliable Compact Design
- Low Power Consumption without Any Cooling Fan Inside
- Coverage up to 1200m² Apartment or up to 2000m² Basement with External Antennas
- Inter-band Carrier Aggregation Supported
- Table Stand and Wall Mount



Models

- ICS-201-B3B8-A



ICS-201 Dual Band ICS Repeater	
System	LTE
Frequency Band	3GPP Band3+Band8
Programmable BW	5~20 MHz / Step 0.2 Mhz
Number of Sub-block	1 Sub-block Per Band
Max. Output Power UL/DL	17±1 dBm
Max. Gain UL/DL	≥75/75 dB
Manual Gain Control	≥ 30 dB @ 1.0 dB/Step
Automatic Gain Control	≥25 dB
Gain Flatness	≤ 3 dBpp, Typically , ≤4 dBpp at Band Edge
Group Delay	≤ 4.5μs
UL/DL EVM	≤ 8% (at Max. Output Power)
UL Noise Figure	≤ 6 dB, Typically (at Max. Gain) ≤7 dB at Band Edge (at Max. Gain)
VSWR	≤ 1.8
Tx/Rx Isolation (per port)	≥ 90 dBc
Max. Input Power Without Damage	≥ 0 dBm (UL&DL)
Frequency Stability	Compliant to 3GPP TS 36.106
Out of Band Gain	
Spurious Emission	
Unwanted Emission (Emission Mask)	
Input Intermodulation	
Output Intermodulation	
Adjacent Channel Rejection Ratio	
ICS Capability	≥30dB (EVM≤8% at Max. Gain)
Built-in Donor & Service Antenna	Antenna Gain ≥ -5.5dBi for Frequency Band < 1700MHz Antenna Gain ≥ 5dBi for Frequency Band > 1700MHz Switch Type with External Donor and Service Antenna
RF Connector	SMA Female, BS Port x1, MS port x1 Switch Type with External Donor and Service Antenna
Impedance	50Ω
Power Supply	100~240ACV, 50/60Hz
Power Consumption	≤20W
Dimensions	198mm x 160mm x 69mm
Weight	≤1.5kgw
IP Rating	IP40
Operating Temperature	0°C ~ +50°C
MTBF	50,000 hrs
Automatic Shut-down Function	RSSI Overpower/Underpower Shutdown, Isolation Shutdown
LED Indicators	Each Band has LED x 12 as mentioned below: RSSI: Green LED x4 to Indicate DL Received Power Strength AGC: Red LED x1 to Indicate AGC Out of Range Alarm ISO: Red LED x1 to Indicate Isolation Alarm Power: Green LED x1 to Indicate The Unit Is Operating Sleep: Green LED x1 to Indicate UL Transmission Mute Output Power: Green LED x4 to Indicate DL Output Power
Local Control	OMT over Micro USB

*Specifications are subject to change without notice

