

2G/3G/4G/5G Indoor Coverage Solutions

ICS-209: Dual Band ICS Repeater

MORELINK® ICS-209 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-209 able to adapt to time-variant isolation environment so as to provide optimized signal coverage all the time. With external antennas and one software programmable Sub-Block per band, ICS-209 can be applied for diverse scenarios in the field.

Significant Features

- LTE FDD Supported
- ▶ 17±1 dBm of Maximum Output Power
- 75dB of Maximum Gain
- One Sub-Block Per Band with Programmable Frequency and Bandwidth
- Adaptive Echo Interference Cancellation to Increase at Least 25dB of Isolation
- Reliable Compact Design with N Type RF Connectors
- Convection Heat Dissipation without Any Cooling Fan Inside
- Coverage of up to 1400m² Apartment or up to 2500m² Basement
- Both Inter-band and Intra-band Carrier Aggregation Supported
- Wall Mount

Models

ICS-209-B20B8-A





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2G/3G/4G/5G Indoor Coverage Solutions

ICS-209 Dual Band ICS Repeater	
System	LTE
Frequency Band	3GPP Band 20 + Band 8
Programmable BW	5~20MHz / Step 0.2MHz
Number of Sub-block	1 Sub-block
Max. Output Power (UL/DL)	17 ± 1 dBm
Max. Gain (UL/DL)	≥75/75dB
Manual Gain Control	$\geq 30 dB@1 dB/Step$
Automatic Gain Control	≥25dB
Gain Flatness	$\leq 3dBpp$, Typically / $\leq 6dBpp$ at Band Edge
Group Delay	≤ 4.5μs
UL/DL EVM	≤ 8% (at Max. Output Power)
UL Noise Figure	≤8dB (at Max. Gain), Typically
	≤ 10dB (at Max. Gain) at Band Edge
VSWR	= 100D (at Nation State) at Ballo 2000 ≤ 2.5
Max. Input Power Without Damage	= 200 ≥ 0 dBm (UL&DL)
Tx/Rx Isolation (per port)	= 50dBc
Frequency Stability	
Out of Band Gain	1
Spurious Emission	1
Unwanted Emission (Emission Mask)	Compliant to 3GPP TS 36.106
Input Intermodulation	
Output Intermodulation	1
Adjacent Channel Rejection Ratio	-
ICS Capability	≥25dB (EVM≤8% at Max. Gain)
RF Connector	N Type Female
Impedance	50W
Power Supply	12V/5A, 100~240ACV, 50/60Hz
Power Connector	GX12
Power Consumption	≤ 24W
Dimensions	280mm x 265mm x 77mm
Weight	≤ 5kgw
IP Rating	iP40
Operating Temperature	0°C ~ +50°C
MTBF	50.000 hrs
Automatic Shut-down Function	RSSI Overpower/Underpower Shutdown, Isolation Shutdown
Automatic Shut-down Punction	Power: Green LED x 1 to Indicate The Unit Is Operating
	ISO: Red LED x 2 to Indicate ISO Alarm
LED Indicators	MUTE: Red LED x 2 to Indicate ISO Alarm MUTE: Red LED x 2 to Indicate All UL Channels are Stop Transmission
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T 10 (1	ALM: Red LED x 2 to Indicate Another Alarm except ISO
Local Control	OMT over Micro USB

^{*}Specifications are subject to change without notice



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