

Product Specification

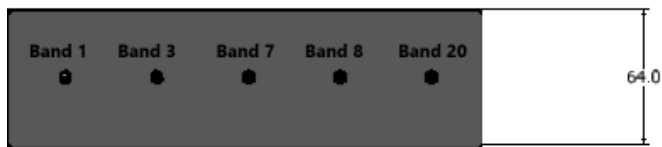
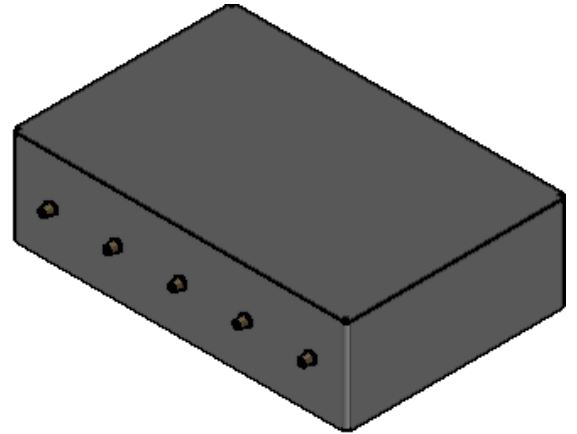
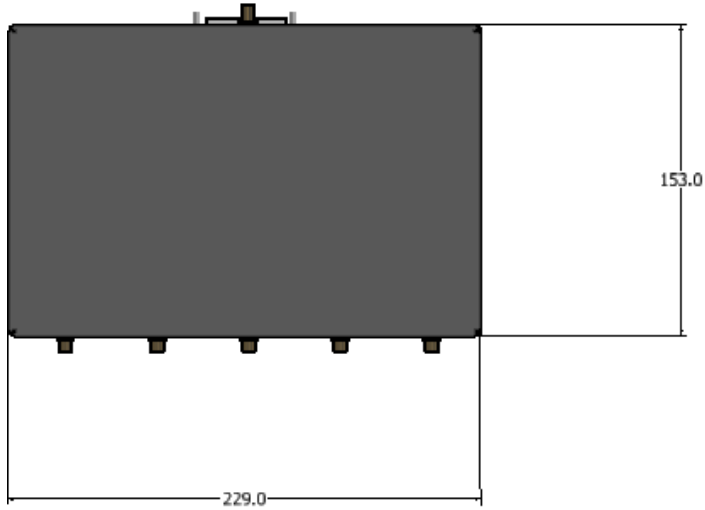
CMIINV-5BLTE-RM Band 1/Band 3/Band 7/Band 8/Band 20 Receive Module

Electrical Specifications	Band 1
Frequency Range Band 1 Down-link	2110 to 2170 MHz
Frequency Range Band 1 Up-Link	1920 to 1980 MHz
Band 1 Up-Link/Down-Link Isolation	50dB min
Band 1 Rejection	50dB min DC – 1880 MHz, 2500 – 3000 MHz
Band 3	
Frequency Range Band 3 Down-link	1805 to 1880 MHz
Frequency Range Band 3 Up-Link	1710 to 1785 MHz
Band 3 Up-Link/Down-Link Isolation	50dB min
Band 3 Rejection	50dB min DC – 1000 MHz, 1920 – 3000 MHz
Band 7	
Frequency Range Band 7 Down-link	2620 to 2690 MHz
Frequency Range Band 7 Up-Link	2500 to 2570 MHz
Band 7 Up-Link/Down-Link Isolation	50dB min
Band 7 Rejection	50dB min DC – 2200 MHz
Band 8	
Frequency Range Band 8 Down-link	925 to 960 MHz
Frequency Range Band 8 Up-Link	880 to 915 MHz
Band 8 Up-Link/Down-Link Isolation	50dB min
Band 8 Rejection	50dB min DC – 862 MHz, 1710 - 3000MHz
Band 20	
Frequency Range Band 20 Down-link	791 to 821 MHz
Frequency Range Band 20 Up-Link	832 to 862 MHz
Band 20 Up-Link/Down-Link Isolation	50dB min
Band 20 Rejection	50dB min DC – 700MHz, 880 – 3000 MHz

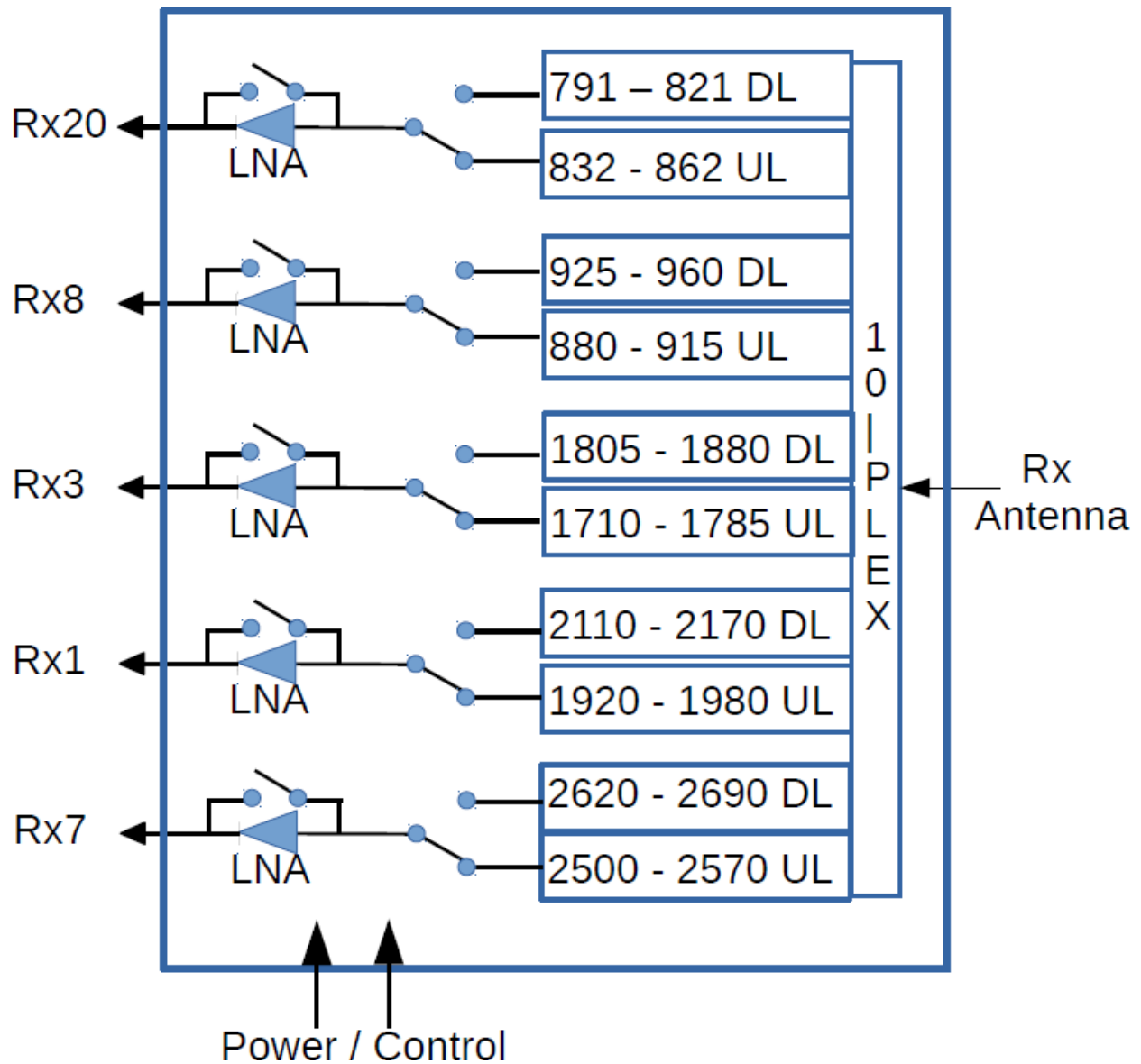
Electrical Specifications Continued	
Insertion Loss, all bands (Antenna to RX port)	-9dB max (LNA Bypass Mode)
LNA Noise Figure	+22dB min (LNA Enable Mode)
Return Loss	0.7 dB typ
RF Input Power	10 dB min
RF Input / Output Connectors	+30dBm Max In-Band RF Power at Ant (LNA Disabled)
Impedance	+40Bm Max Out-of-Band RF Power at Ant
DC Input Power	-30dBm LTE/UMTS Signal (LNA Enabled)
Switching and Bypass Control	+30dBm No Damage (LNA Enabled)
DC Power and Control Connector	SMA-Female
Operating Temperature	50 Ω
Dimensions	12 Volts +/-10% 300mA max

Overall Dimensions

Note: All dimensions are in mm



Block Diagrams



Connector Pin Out

Pin #	Function
1, 2	+12VDC Power
3, 4	Power Return
5	Band 1 Tx/Rx Select +
6	Band 1 Tx/Rx Select -
7	Band 1 LNA Bypass Control +
8	Band 1 LNA Bypass Control -
9	Band 3 Tx/Rx Select +
10	Band 3 Tx/Rx Select -
11	Band 3 LNA Bypass Control +
12	Band 3 LNA Bypass Control -
13	Band 7 Tx/Rx Select +
14	Band 7 Tx/Rx Select -
15	Band 7 LNA Bypass Control +
16	Band 7 LNA Bypass Control -
17	Band 8 Tx/Rx Select +
18	Band 8 Tx/Rx Select -
19	Band 8 LNA Bypass Control +
20	Band 8 LNA Bypass Control -
21	Band 20 Tx/Rx Select +
22	Band 20 Tx/Rx Select -
23	Band 20 LNA Bypass Control +
24	Band 20 LNA Bypass Control -
25	No Connect

Truth Tables

UL/DL Select +	UL/DL Select -	State
1	0	DL Band Connected to Antenna
0	1	UL Band Connected to Antenna

LNA Bypass Control +	LNA Bypass Control -	State
1	0	LNA Bypassed
0	1	LNA Enabled

Controls for Bands 1, 3, 7, 8 and 20 are identical