

INSTALLATION GUIDE

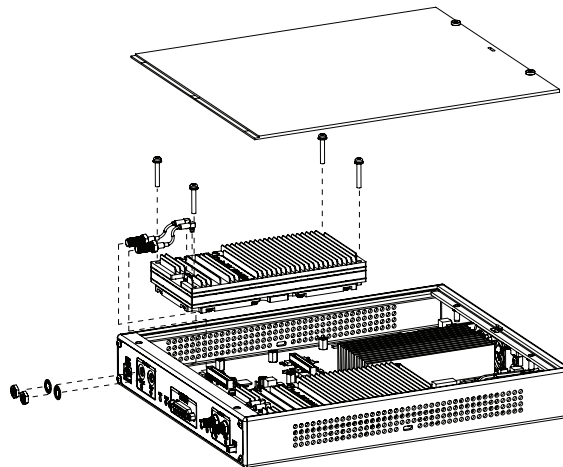
TwinRX Module for Ettus USRP X310

Kit Contents:

- Qty. 1 – MODULE ASSEMBLY, DUAL CHANNEL RX DAUGHTERBOARD, 80 MHZ
- Qty. 2 – CABLE ASSY, SMA BH FEMALE TO MMCX RA MALE (pn 763317-01)
- Qty. 1 – SCREW KIT, M3 X 20 TORX PNHD W/CREST CUP SEM, 4 COUNT, ETTUS TWINRX (pn 140162A-01)
- Qty. 2 – CABLE ASSY, MMCX RA MALE TO MMCX RA MALE (pn 763432-01)

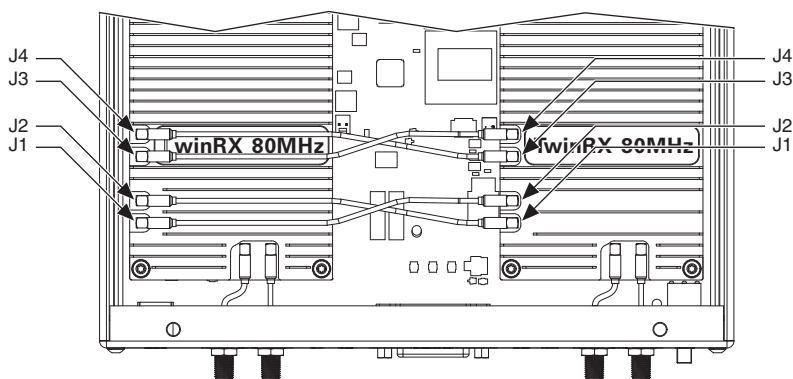
To install the TwinRX Module in an Ettus USRP X310, complete the following steps.

1. Power down the X310 device.
2. Remove the lid of the X310 device.
3. Feed the SMA connectors of two RF cables through the inside of the X310 (RF A or RF B) TX/RX and RX2 ports.
4. Verify that the MMCX RA male connectors point toward the bottom of the X310 device.
5. Secure the SMA connectors with lock washers and hex jam nuts on front panel.
6. Align the TwinRX module with the standoffs on the X310 device and press the device onto the standoffs to attach.
7. Secure the TwinRX module onto the X310 device using the Screw Kit.
8. Press the MMCX RA male connectors onto the TwinRX posts until they click:



To share LOs between two TwinRX Modules, complete the following steps.

1. Attach the four MMCX RA male to MMCX RA male cables in a crisscross fashion between the two modules:
 - J1 to J2
 - J2 to J1
 - J3 to J4
 - J4 to J3



2. Verify that the MMCX RA male to MMCX RA male cables are lying below the level of the heatsink before replacing the lid on the X310 device.

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