

BMD-340-A-R



1. Functional description

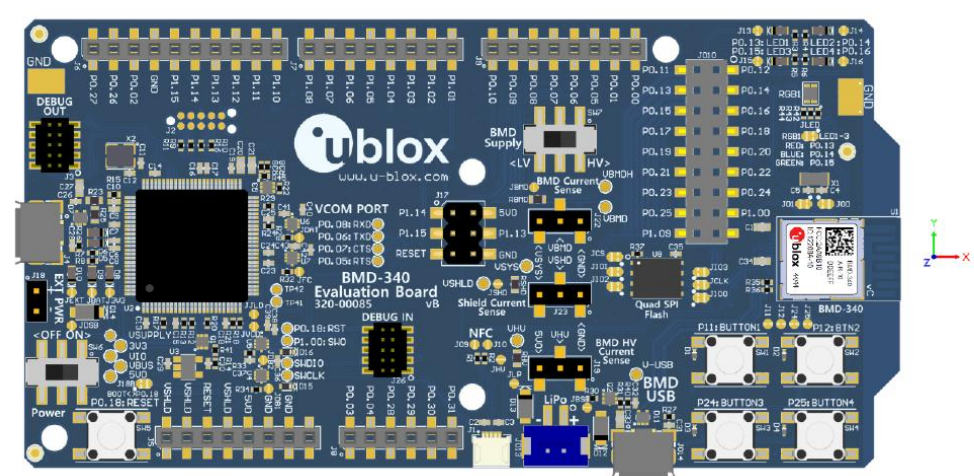
The BMD-340 is an advanced, highly flexible, ultra-low power multiprotocol System on Module (SoM) that enables Bluetooth 5 low energy and IEEE 802.15.4 (Thread and Zigbee) connectivity for portable, and extremely low power embedded systems. With an Arm® Cortex®-M4 with FPU processor, integrated 2.4G Hz transceiver, and an **integrated PCB antenna**, the BMD-340 provides a complete RF solution allowing faster time to market with reduced development costs. Providing full use of the Nordic Semiconductor nRF52840's capabilities and peripherals, the BMD-340 can power the most demanding applications, all while simplifying designs and reducing BOM costs. The BMD-340 is an ideal solution for designs that require Bluetooth 5 features or 802.15.4 based networking for Thread and Zigbee. Increased integration with built in USB and 5.5 V compatible DC/DC supply reduces design complexity and BOM cost, while expanding possible applications. BMD-340 designs are footprint compatible with the BMD-300/301/330/360, providing low-cost flexibility for tiered product lineups.

2. Antenna Specification

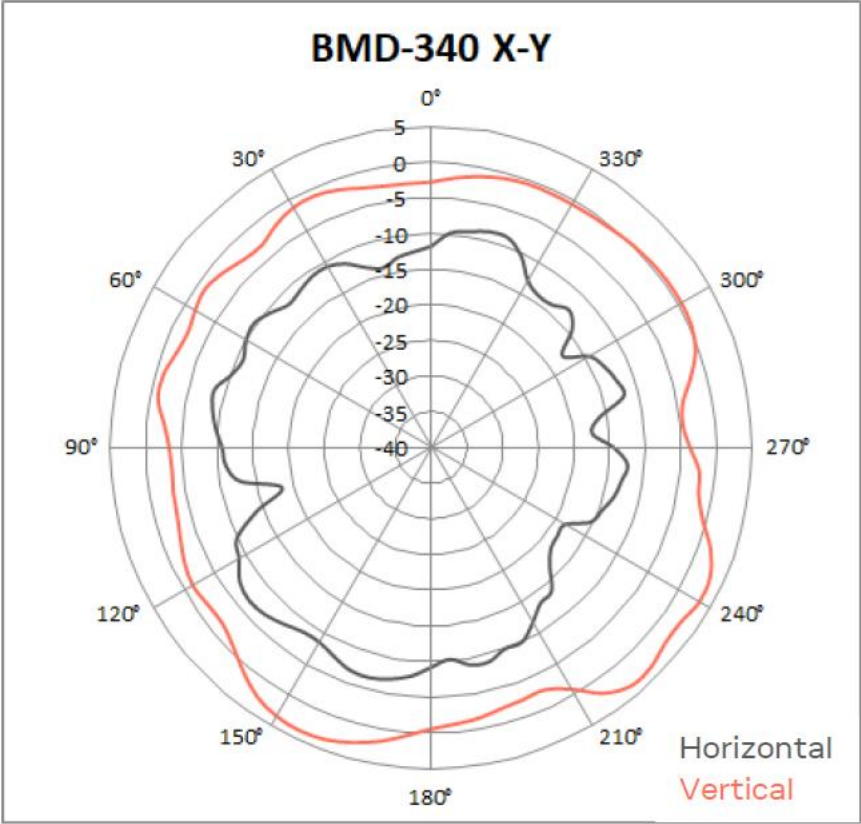
Type ; Integrated PCB antenna
Max Gain : -1 dBi
Impedance : 50 Ohm
Size : 4.40 x 10.20 mm
Approval : FCC, IC , RED. UKCA, Giteki, KC, RCM

3. Antenna patterns

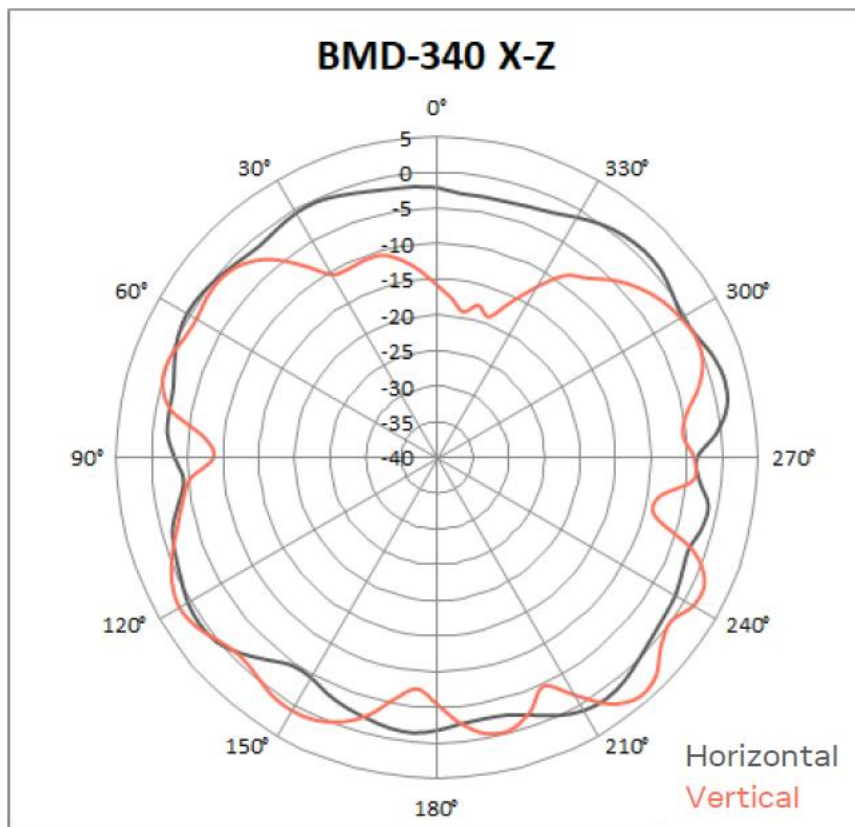
Antenna patterns are based on the BMD-340 Evaluation Kit with a ground plane size of 109 mm x 56 mm.



X-Y plane



X-Z plane



Y-Z plane

