# VANTEON®

# WIRELESS SOLUTIONS

# PRODUCTS

# VGATEWAY

# Internet of Things Bridge Platform

Vanteon vGateway<sup>™</sup> is a modular bridging platform designed to translate between common wireless physical interfaces and protocols for Internet of Things (IoT) applications.



The modular interfaces include the network manager for DUST Networks devices, Zigbee low power mesh network coordinator, low power WiFi supporting 802.11b/g/n, Bluetooth, and cellular (through 4G). The platform includes an ARM core processor with a rich set of peripherals and software stack to support the wireless device physical interfaces and protocols (WiFi, Zigbee, etc.). The provided application software for the ARM core also includes an embedded web server and a database of sensor information from the low power wireless sensor networks.

### **Interfaces Supported:**

 USB 2.0 OTG; Ethernet 10/100; WiFi 802.11 b/g/n 2.4GHz 2x2; Bluetooth 4.0 (classic and BLE); DUST Networks network manager; Zigbee 802.15.4; Cellular 4G, LTE and 3G; Micro SD card

#### Other:

- Power Input: 5 V, 2.5 mm DC power jack
- USB Port: Micro USB
- Ethernet Port: RJ45

# **Accelerate Your Design**

Vanteon's engineering team can increase your effectiveness in the IoT.

# Call us at 888.506.5677



*Celebrating over 30 years of service, innovation, and collaboration.* 

# Performance:

#### WiFi

- Transmit Power: +17 dBm Max (varies with waveform)
- Sensitivity: -96.3 dBm for 1 Mbps DSSS, -74.9 dBm for 54 Mbps OFDM
- Frequency Band: 2.4 GHz
- Security: Enterprise
- Antenna: 2 chip antennas

#### **DUST Networks**

- Transmit Power: +8dBm max
- Sensitivity: -93dBm for 1% PER
- Frequency Band: 2.4 GHz
- Antenna: MMCX connector for external antenna

#### Zigbee

- Transmit Power: +22dBm max
- Sensitivity: –91 dBm
- Frequency Band: 2.4 GHz
- Antenna: Embedded PCB antenna

#### Bluetooth

- Transmit Power: +11.7 dBm for basic rate, +7.2 dBm for enhanced data rate
- Sensitivity: -92 dBm for BR (BER=0.1%) and EDR2 (2Mbps, BER=0.01%). -84.7 dBm for EDR3 (3Mbps, BER=0.01%)
- Frequency Band: 2.4 GHz
- Antenna: Shared with WiFi

#### Cellular

- Carrier: AT&T or Verizon
- Transmit Power: 0.25W LTE, 0.2W CDMA
- Sensitivity: -103 dBm for LTE band 5 (throughput >95%, 10MHz dual receiver). 115 dBm for CDMA band 5 (BER <0.1%, 12.2 kbps dual receiver)</li>
- Frequency Band: Configurable to bands 2 (1900 MHz), 4 (1700 MHz), 5 (850 MHz), 13 (700 M Hz, LTE only)
- Antenna: MMCX connector