

The logo features the word "VANET" in a bold, white, sans-serif font, followed by a registered trademark symbol (®). It is centered on a background of a network diagram with nodes and lines, overlaid on a colorful geometric pattern of triangles in shades of blue, purple, and pink.

VANET®

iVANET's VA Router_VTI-be6100

- VANET Inc. has developed its own Wi-Fi routers by integrating its proprietary protocol (iStack) into a thin layer of the TCP/IP stack.
- VANET's proprietary protocols enable the routers to form a Wi-Fi-based WAN with mobility and provide congestion control to ensure wired internet quality.
- **VTI-be6100** is equipped with Wi-Fi 7 as the most advanced Wi-Fi standard and is designed for enterprise, building networks for functioning mesh networks.

Product Overview (VTI-be6100)

1. System

CPU + 2.4GHz SoC	Qualcomm "Bells" IPQ9570
2.4GHz RF	Qualcomm "Waikiki" QCN9274
5GHz Wi-Fi	Qualcomm "Waikiki" QCN9274
6GHz Wi-Fi	Qualcomm "Waikiki" QCN9274
10GbE PHY	Marvell "AQRate" AQR113C
RAM	Qualcomm "Manhattan" QCA8082
NAND FLASH	DDR4 SDRAM 1 GB
NOR FLASH	eMMC 8 GB
GPS	N/A
Barometer	N/A

2. Mechanical Dimensions

Chassis Size (L * H * D) mm	80 x 258 x 172 mm	
Chassis Type	Tower type	
PCB Dimensions	155 x 155 x 1.6 mm 6 Layers FR4	
Chassis material	Front panel	ABS
	Back panel and body	ABS

3. Supports Standard

- IEEE 802.11 a/b/g/n/ac/ax/be
- WPA2, WPA3
- Wi-Fi Mesh
- 10BASE-T_e/100BASE-T_x/1000BASE-T/2.5GBASE-T/10GBASE-T, IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3bz, IEEE 802.3an compliant

4. Features

AP-MCU : Quad Arm Cortex A73 at 2.2 GHz, 64-bit ISA v8 instruction set, 33.792K DMIPS

- 64-bit floating-point and NEON SIMD DSP for each core
- Supports crypto instruction extensions

Security

- CPU-Crypto engine
- CPU-Trust Zone

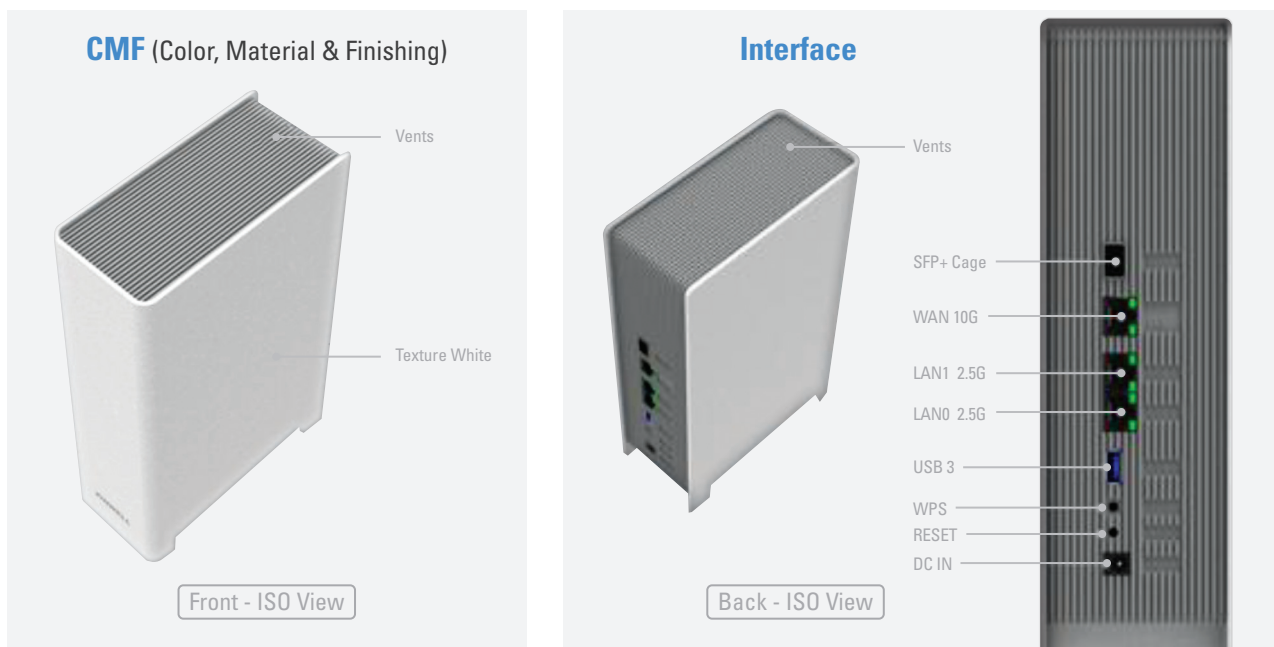
Wi-Fi

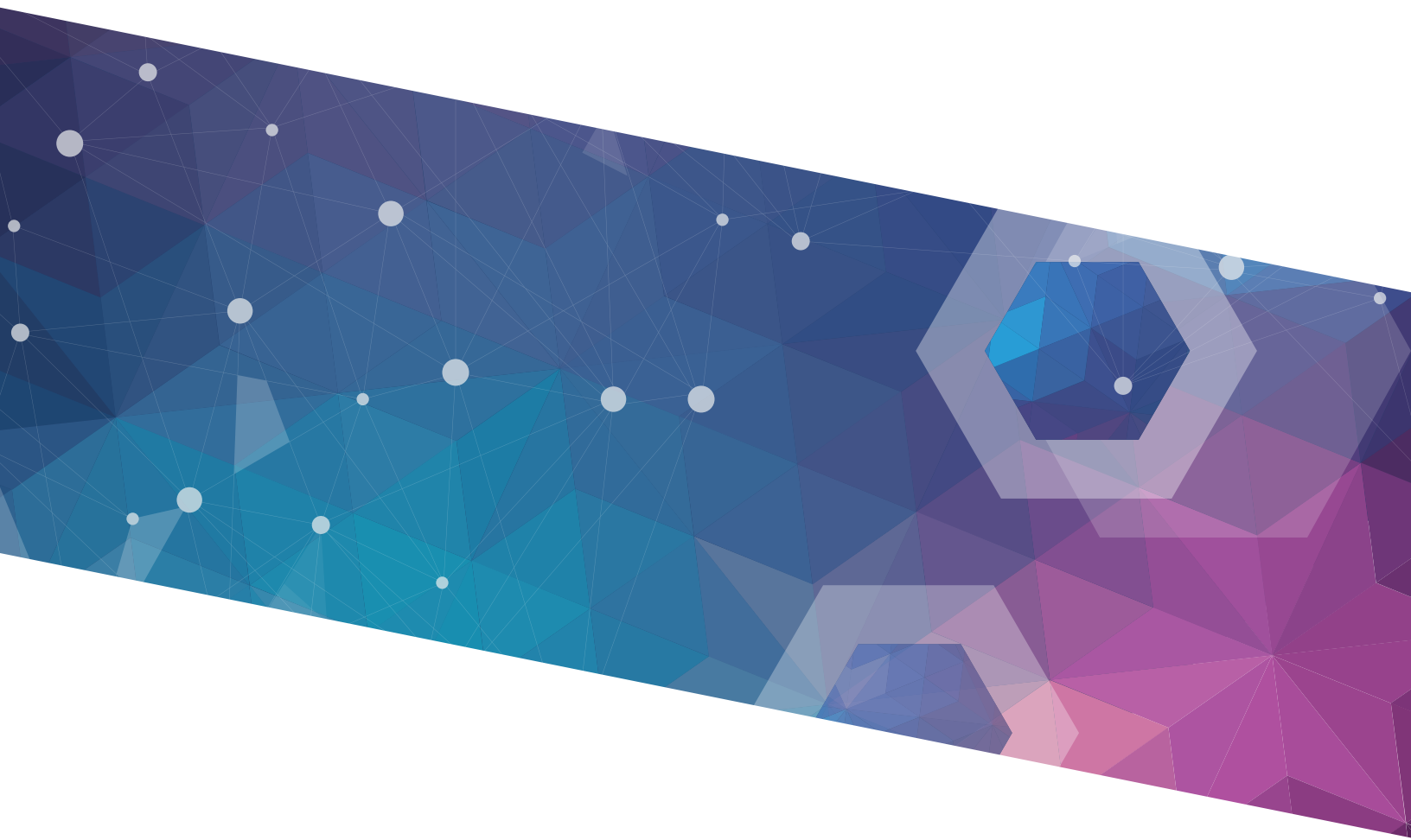
- Supports 20/40 MHz in 2.4 GHz
- Supports 20/40/80/160 MHz in 5 GHz
- 2.4 GHz data rate up to 1376 Mbps in 802.11be 40 MHz mode
- 5 GHz data rates of up to 5764 Mbps in 802.11be 160 MHz channels
- 6 GHz data rates of up to 11530 Mbps in 802.11be 320 MHz channels
- UL OFDMA / MU-MIMO, DL OFDMA / MU-MIMO
- Tx Beamformer (Explicit/Implicit) and Rx Beamformee
- TxBF, MU-MIMO, MU-OFDMA/TxBF, STBC, LDPC
- DFS (Dynamic Frequency Selection)
- AMPDU/AMSDU RX (de-aggregation) and TX (aggregation) support

5. Temperature

Ambient Operating temperature	0°C~+40°C
Ambient Storage temperature	-30°C~+70°C

6. ID Concept (VTI-be6100)





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VANET Inc. is one-of-a-kind wireless infrastructure and Application Company. Insisting on supreme technologies, VANET Inc. sets out to create the best Internet Solution Technologies to enable transparent and non-disruptive convergence for the next-generation-Internet.