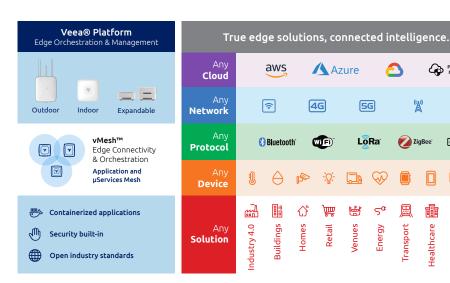


Compact Indoor Smart Computing Hub with Integrated Wireless Access, Server-Class Processing, Mesh Scalability & Expandability

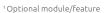
The VeeaHub® STAX is the latest member of the VeeaHub family, offering a compact footprint for easy deployment, along with the latest processing and connectivity options available in an integrated edge access/computation platform.

Designed to meet the needs of a broad array of smart applications, the VeeaHub STAX integrates wired and wireless connectivity, quad core compute resources, and enough storage to support low-latency, IoT and data-intensive edge applications with no-code AI while providing for privacy and data sovereignty and context awareness — all secured by a chain of trust that starts with the hardware that will only run digitally signed software.

The VeeaHub STAX extends the capabilities of the VeeaONE Platform which is resetting the bar in edge computing, connectivity and security simplicity with a broad range of capabilities typically required for most use cases in one highly integrated unit with mesh networking and computing.



VeeaHub is a highly integrated connectivity and computation platform which integrates local mesh interconnect, wireless communication and compute capability into a single scalable unit. Designed to be used either standalone or as part of a mesh network, the VeeaHub combines the functions of Wireless Routers, IoT Gateways, and local servers into a single cloud-managed unit Central to managing this sophisticated wireless network is the VeeaCloud; a cloud-based dashboard that provides multiple easy to view graphical user interfaces backed up by a powerful backend management tool.



²Veea holds unique IP on Secure Docker containers that provide for highly secure platform environment for sandboxed applications to run on VeeaHub.







Private Cloud
Multi-Cloud

RS232 RS485

(A)

[5G]

LoRa

Product Highlights

- Tri-band Wi-Fi 6 Access Point
- IoT Gateway supporting Bluetooth (Classic and Bluetooth LE), Zigbee, Thread/ 6LoWPAN, GNSS supported by 4G LTE or 5G (Sub-6 GHz) WAN
- Mesh router with advanced networking
- Linux server with quad-core CPU and virtualized software environment for Secure Docker² containers, Software Defined Networking (SDN) and **Network Function Virtualization**
- Up to 2TB local Storage with optional NVMe support via module
- Veea Developer Portal with toolkit for application developers
- IoT Gateway Application toolkit with automation tools and templates
- · Comprehensive multi-tenant cloud management
- Modular expandability
- Fan-less; No special cooling required
- Operating temperature 0°C to 40°C





Modular Expandability

Unlike fixed, single-purpose devices, the VeeaHub STAX is designed to grow with your business needs. The platform supports a modular expansion system that allows customers to add capabilities such as Power-over-Ethernet (PoE) or 5G connectivity.



Modules can be pre-installed at purchase as part of a bundle, or shipped separately for technician installation at a later stage. Once attached, the modules are automatically detected and configured by the system, eliminating the need for complex setup. Businesses can monitor and manage module performance directly through Veea Control Center or the VeeaHub Manager mobile app, ensuring full visibility and control from day one.

This modular design future-proofs deployments, giving enterprises the flexibility to add advanced features only when needed, reducing upfront costs while ensuring long-term scalability.

The 5G and PoE modules for VeeaHub STAX provide significant business benefits by enhancing connectivity and reducing the total cost of ownership (TCO). With the 5G Module, businesses gain high-speed wireless access in areas lacking reliable wired connections. The PoE module simplifies infrastructure by delivering both power and data through a single Ethernet cable, cutting down on installation costs and reducing the need for additional power outlets, making device placement more flexible.



Complete Edge Platform in a Compact Design

With its small footprint, modular expandability, optional 5G connectivity, and NVMe-enabled performance, the VeeaHub STAX represents a new class of compact edge computing platform. It brings together computing, connectivity, and storage in one unit that is easy to deploy, scale, and manage through the VeeaONE ecosystem.

Whether supporting IoT devices, enabling high-speed connectivity in underserved areas, or powering data-intensive applications, the VeeaHub STAX delivers enterprise-grade capability in a package no bigger than your hand.



Compute	
Processing	Arm® Cortex®-A53 Quad-core @ 1.4GHz
Memory	• 3 GB PCDDR4
Internal Storage	• 32 GB eMMC flash
External Storage	Up to 2TB via microSDXC™ Optional 1 TB or 2 TB NVMe® Storage Module
Hardware Acceleration	Dual Network Processing Units @ 1.5GHz Cryptography Engine Packet Processing Engine

Wi-Fi®	
Standards	Tri-band IEEE 802.11 a/b/g/n/ac/ax
Radio Chains and Peak PHY Rates	 2.4GHz: 2x2:2 / 574 Mbps 5.2GHz: 2x2:2 / 1201 Mbps 5.7GHz: 2x2:2 / 1201 Mbps
Bandwidth	• 20, 40, 80 MHz
SSID Management	• 12 SSIDs, 4 per WiFi radio
Capacity	• 128 clients per radio
Security	WPA-PSK, WPA-TKIP, WPA2 AES, WPA3, 802.11i SSID (AP Isolation) Dynamic PSK
Other Features	 Channel Selection (DFS/ACS) Device Roaming (802.11r) AP, Hotspot
RF Configuration	2 internal antenna per WiFi radio Patented antenna design
Frequency Bands	 2.4 - 2.484 GHz (ISM) 5.17 - 5.25 GHz (U-NII-1) 5.25 - 5.33 GHz (U-NII-2) 5.49 - 5.73 GHz (U-NII-2e) 5.73 - 5.83 GHz (U-NII-3)

IoT Connectivity						
Bluetooth®	Bluetooth Classic 4.2 Bluetooth 5.x (Bluetooth Low Energy)					
Zigbee®	Zigbee 3.0, Zigbee Pro					
Thread®	Supported					

WWAN Connectivity							
C	Optional with 4G or 5G modules						
5G Module	 3GPP R.16 NSA/SA, Sub-6 GHz GNSS External uSIM tray Internal eSIM 						
4G / LTE Module	CAT-6 to CAT-19GNSSExternal uSIM trayInternal eSIM						

Networking	
Mesh	Wired or Wireless vMesh® Technology
IP	IPv4, IPv6, dual-stack
Security	Stateful Firewall 802.1Q VLAN 802.1x VXLAN

Physical Interfaces						
Status LED(s)	Multi-color status LED					
WAN / LAN Ports	• 2x 1000 Base-T Ethernet					
Expansion Connector	Proprietary, multiple high-speed interconnects					
PoE	Optional cradle					
Other	microSDXC™ SlotReset button					

Physical Characteristics						
Environment	• Indoors					
Colors	• White					
Dimensions (L x W x H)	 107mm x 107mm x 49mm (base unit) 107mm x 107mm x 87mm (with 4G or 5G Module) 					
Weight	0.41 kg (base unit)0.69 kg (with 4G or 5G Module)					
Mounting Options	DeskCeiling					
Operating Temp.	• 0°C to 40°C					

Power						
Power Supply	• 12 VDC @ 2.5A					
Typical Consumption	 15.8 W (base unit) 20.8 W (with 5G module) 20.8 W (with PoE module) 20.3 W (with NVMe module) 					

Certifications and Compliance				
Electric Certifications	FCC/CE/KC/SSRC/UL			

Software & Services						
For more information, visit veea.com/resources						
Management & Monitoring	Veea Control Center VeeaHub Manager					
Cloud Services • Veea Cloud						
VeeaWare & Edge Applications	Containerized applications VeeaHub Developer Toolkit					



2.4GHz – RX Sensitivity / TX Power (dBm)									
		НТ2	0		HT40				
	M	CS0	MC	MCS0 MCS			S7		
RX	-!	94	-7:	5	-	91	-72		
TX	2	21	19	19		21		19	
		HE2	0		HE40				
	MCS0	MCS7	MCS9 MCS11		MCS0	MCS7	MCS9	MCS11	
RX	-94	-75	-70	-64	-91	-73	-67	-61	
TX	21	19	18	16	21	19	18	16	

5GHz – RX Sensitivity / TX Power (dBm)											
VHT20 VHT40 VHT80											
MCS0	MCS7	MCS8	MCS9	MCS0	MCS0 MCS7 MCS8 MCS9				MCS7	MCS8	MCS9
-92	-73	-70	-	-89	-70	-67	-64	-86	-67	-64	-61
20	18	17	-	20	18	17	17	20	18	17	17
	HE	20			HE	40			HE	80	
MCS0	MCS7	MCS9	MCS11	MCS0	MCS7	MCS9	MCS11	MCS0	MCS7	MCS9	MCS11
-92	-73	-67	-63	-89	-70	-65	-60	-86	-67	-62	-57
20	18	17	15	20	18	17	15	20	18	17	15

5G Mo	5G Module (Optional)				
Chipset		Qualcomm Snapdragon X62-based			
eSIM / uSIM		External uSIM tray Internal eSIM			
5G	NR	3GPP Release 16 NSA/SA operation, Sub-6 GHz			
	NSA Bands	• n1/n2/n3/n5/n7/n8/n12/n13/n18/n20/n25/n26/n28/n30/n38/n40/n41/n48/n66/n71/n77/n78/n79			
	SA Bands	• n1/n2/n3/n5/n7/n8/n12/n13/n18/n20/n25/n26/n28/n30/n38/n40/n41/n48/n66/n71/n77/n78/n79			
	Sub-6 CA	• FDD+FDD, TDD+TDD, FDD+TDD 2CA			
	DL 4x4 MIMO	• n1/n2/n3/n7/n25/n38/n41/n48/n66/n77/n78/n79			
4G	Category	• CAT-19			
	Bands	• B1/B2/B3/B4/B5/B7/B8/B12(B17)/B13/B14/B18/B19/B20/B26/B28/B29/B30/B32/B38/B39/B40/B41/B42/B43/B48/B66/B71			
	DL 4x4 MIMO	• B1/B2/B3/B4/B7/B38/B41/B42/B43/B48/B66			

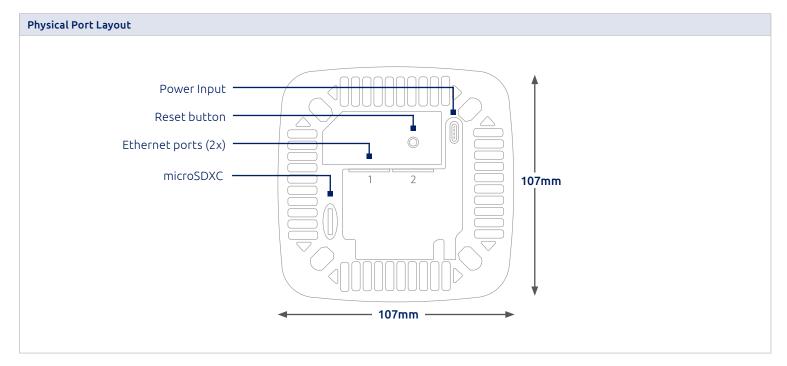
PoE Module (Optional)		
Standard	Support PoE++ (802.3bt Type 3, Class 4 or Class 5)	
Dimensions	48mm high (module itself)78.5mm high (with STAX Base)	
Ethernet	 nBase-T Multi-Gigabit Ethernet RJ45 Copper 1G, 2.5G, 5G and 10G speeds 	
Roles	Configurable as a LAN or WAN interface	
Mounting Options	Ceiling Wall	
Notes	Class 5 required for additional modules such as 5G.	

NVMe Module (Optiona	NVMe Module (Optional)		
Standard	NVM Express (NVMe)		
Dimensions	19.14mm high (module itself)68.14mm high (with STAX Base)		
Storage Options	• 1 TB • 2 TB		
Performance	Write: up to 200MBps Read: up to 450MBps		
Use Cases	 Streaming & Video on Demand (VoD) AI Model Inference at the Edge Metaverse & Real-Time 3D Rendering Storage/CDN Cybersecurity and DDoS Mitigation 		



Warranty		
Туре	Limited device warranty VeeaCare extended warranty packages available.	

Ordering Information				
Contact us at sales@veea.com for sales or additional information				
Model Number	• VHC25			
Optional Accessories	 VeeaCare packages 4G/LTE Module 5G Module NVMe Storage Module Mounting Bracket Spare Ethernet Cable 			



 $Specifications \, subject \, to \, change \, without \, notice. \, Country-specific \, regulatory \, information \, is \, available \, upon \, request.$

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