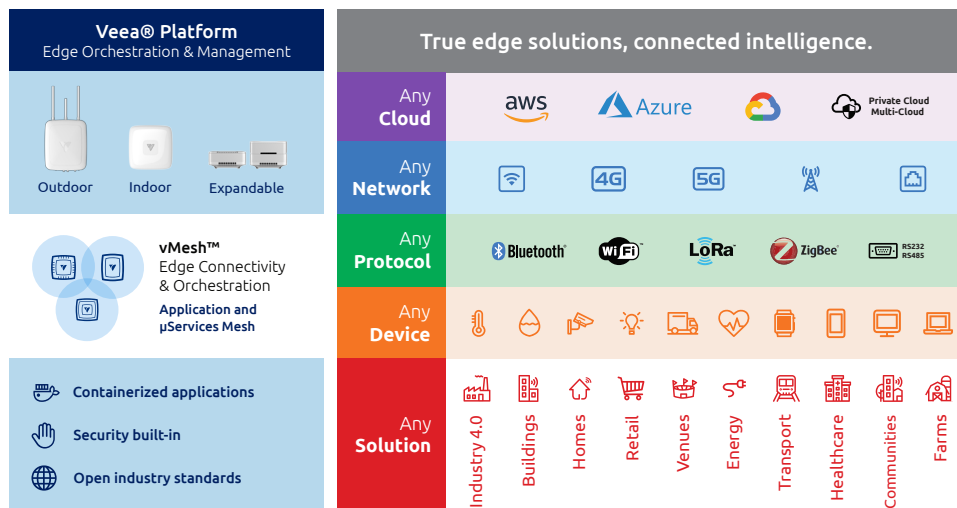


# Compact Indoor Smart Computing Hub with Integrated Wireless Access, Server-Class Processing, Mesh Scalability & Expandability

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 Veeahub Edge 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 Veeahub; a cloud-based dashboard that provides multiple easy to view graphical user interfaces backed up by a powerful backend management tool.

<sup>1</sup> Optional module/feature

<sup>2</sup> Veeahub holds unique IP on Secure Docker containers that provide for highly secure platform environment for sandboxed applications to run on Veeahub.



## 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 Docker<sup>2</sup> containers, Software Defined Networking (SDN) and Network Function Virtualization
- Up to 2TB local Storage with optional NVMe support via module
- Veeahub 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



Compute	
Processing	<ul style="list-style-type: none"> <li>Arm® Cortex®-A53</li> <li>Quad-core @ 1.4GHz</li> </ul>
Memory	<ul style="list-style-type: none"> <li>3 GB PCDDR4</li> </ul>
Internal Storage	<ul style="list-style-type: none"> <li>32 GB eMMC flash</li> </ul>
External Storage	<ul style="list-style-type: none"> <li>Up to 2TB via microSDXC™</li> <li>Optional 1 TB or 2 TB NVMe® Storage Module</li> </ul>
Hardware Acceleration	<ul style="list-style-type: none"> <li>Dual Network Processing Units @ 1.5GHz</li> <li>Cryptography Engine</li> <li>Packet Processing Engine</li> </ul>

Wi-Fi®	
Standards	<ul style="list-style-type: none"> <li>Tri-band IEEE 802.11 a/b/g/n/ac/ax</li> </ul>
Radio Chains and Peak PHY Rates	<ul style="list-style-type: none"> <li>2.4GHz: 2x2:2 / 574 Mbps</li> <li>5.2GHz: 2x2:2 / 1201 Mbps</li> <li>5.7GHz: 2x2:2 / 1201 Mbps</li> </ul>
Bandwidth	<ul style="list-style-type: none"> <li>20, 40, 80 MHz</li> </ul>
SSID Management	<ul style="list-style-type: none"> <li>12 SSIDs, 4 per WiFi radio</li> </ul>
Capacity	<ul style="list-style-type: none"> <li>128 clients per radio</li> </ul>
Security	<ul style="list-style-type: none"> <li>WPA-PSK, WPA-TKIP, WPA2 AES, WPA3, 802.11i</li> <li>SSID (AP Isolation)</li> <li>Dynamic PSK</li> </ul>
Other Features	<ul style="list-style-type: none"> <li>Channel Selection (DFS/ACS)</li> <li>Device Roaming (802.11r)</li> <li>AP, Hotspot</li> </ul>
RF Configuration	<ul style="list-style-type: none"> <li>2 internal antenna per WiFi radio</li> <li>Patented antenna design</li> </ul>
Frequency Bands	<ul style="list-style-type: none"> <li>2.4 - 2.484 GHz (ISM)</li> <li>5.17 - 5.25 GHz (U-NII-1)</li> <li>5.25 - 5.33 GHz (U-NII-2)</li> <li>5.49 - 5.73 GHz (U-NII-2e)</li> <li>5.73 - 5.83 GHz (U-NII-3)</li> </ul>

IoT Connectivity	
Bluetooth®	<ul style="list-style-type: none"> <li>Bluetooth Classic 4.2</li> <li>Bluetooth 5.x (Bluetooth Low Energy)</li> </ul>
Zigbee®	<ul style="list-style-type: none"> <li>Zigbee 3.0, Zigbee Pro</li> </ul>
Thread®	<ul style="list-style-type: none"> <li>Supported</li> </ul>

WWAN Connectivity	
Optional with 4G or 5G modules	
5G Module	<ul style="list-style-type: none"> <li>3GPP R.16 NSA/SA, Sub-6 GHz</li> <li>GNSS</li> <li>External uSIM tray</li> <li>Internal eSIM</li> </ul>
4G / LTE Module	<ul style="list-style-type: none"> <li>CAT-6 to CAT-19</li> <li>GNSS</li> <li>External uSIM tray</li> <li>Internal eSIM</li> </ul>

Networking	
Mesh	<ul style="list-style-type: none"> <li>Wired or Wireless</li> <li>vMesh® Technology</li> </ul>
IP	<ul style="list-style-type: none"> <li>IPv4, IPv6, dual-stack</li> </ul>
Security	<ul style="list-style-type: none"> <li>Stateful Firewall</li> <li>802.1Q VLAN</li> <li>802.1x</li> <li>VxLAN</li> </ul>

Physical Interfaces	
Status LED(s)	<ul style="list-style-type: none"> <li>Multi-color status LED</li> </ul>
WAN / LAN Ports	<ul style="list-style-type: none"> <li>2x 1000 Base-T Ethernet</li> </ul>
Expansion Connector	<ul style="list-style-type: none"> <li>Proprietary, multiple high-speed interconnects</li> </ul>
PoE	<ul style="list-style-type: none"> <li>Optional cradle</li> </ul>
Other	<ul style="list-style-type: none"> <li>microSDXC™ Slot</li> <li>Reset button</li> </ul>

Physical Characteristics	
Environment	<ul style="list-style-type: none"> <li>Indoors</li> </ul>
Colors	<ul style="list-style-type: none"> <li>White</li> </ul>
Dimensions (L x W x H)	<ul style="list-style-type: none"> <li>107mm x 107mm x 49mm (base unit)</li> <li>107mm x 107mm x 87mm (with 4G or 5G Module)</li> </ul>
Weight	<ul style="list-style-type: none"> <li>0.41 kg (base unit)</li> <li>0.69 kg (with 4G or 5G Module)</li> </ul>
Mounting Options	<ul style="list-style-type: none"> <li>Desk</li> <li>Ceiling</li> </ul>
Operating Temp.	<ul style="list-style-type: none"> <li>0°C to 40°C</li> </ul>

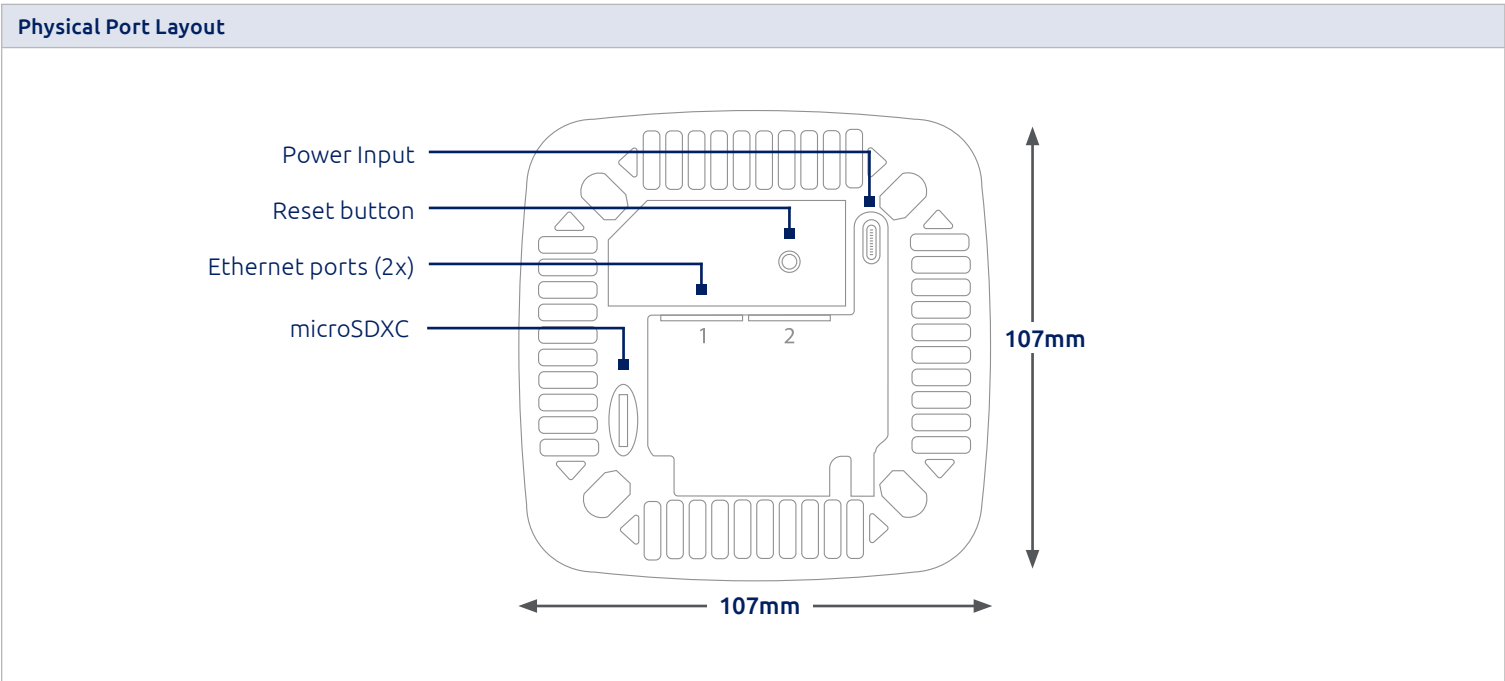
Power	
Power Supply	<ul style="list-style-type: none"> <li>12 VDC @ 2.5A</li> </ul>
Typical Consumption	<ul style="list-style-type: none"> <li>14.1 W (base unit)</li> <li>18 W (with 4G or 5G module)</li> </ul>

Certifications and Compliance	
Electric Certifications	<ul style="list-style-type: none"> <li>FCC / CE / KC / SSRC / UL</li> </ul>

Software & Services	
For more information, visit <a href="https://veea.com/resources">veea.com/resources</a>	
Management & Monitoring	<ul style="list-style-type: none"> <li>Veeahub Control Center</li> <li>Veeahub Manager</li> </ul>
Cloud Services	<ul style="list-style-type: none"> <li>Veeahub Cloud</li> </ul>
VeeahubWare & Edge Applications	<ul style="list-style-type: none"> <li>Containerized applications</li> <li>Veeahub Developer Toolkit</li> </ul>

Warranty	
Type	<ul style="list-style-type: none"><li>Limited device warranty</li><li>VeeahCare extended warranty packages available.</li></ul>

Ordering Information	
Contact us at <a href="mailto:sales@veea.com">sales@veea.com</a> for sales or additional information	
Model Number	<ul style="list-style-type: none"><li>VHC25</li></ul>
Optional Accessories	<ul style="list-style-type: none"><li>VeeahCare packages</li><li>4G/LTE Module</li><li>5G Module</li><li>NVMe Storage Module</li><li>Mounting Bracket</li><li>Spare Ethernet Cable</li></ul>



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

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