WaveTunnel™ WT 2041SM-US0

The WaveTunnel 2041-SM is an indoor wireless backhaul system supporting multiple in-building topologies. Operating in the 60 GHz band, this is a point-to-point (PtP) system with a 2Gbps maximum throughput rate and a 100-meter link range.

The system has an advanced RF front end with enough gain to beam through indoor wall materials thus enabling NLOS backbones, and with +/- 45-degree steering can also avoid obstacles and beam around corners. The unit can be configured quickly by using a Smartphone App, AirvineMobile™ or a browser version, VineManager™. Powered by a collection of software, VineSuite, the WaveTunnel is the world's first mmWave indoor wireless backbone.

The WaveTunnel system can be employed in a variety of applications or markets. The product has been designed from the ground up to be simple to install, simple to configure and simple to use. All of this means no rf or special skills are needed enabling installation of a single unit in minutes.

WaveTunnel is ideal for a multitude or applications, a sampling are listed here:

• Multiple Dwelling Units
• Hospitality
• Industrial and Manufacturing
• Large Private Venue

Featured benefits for these and other applications includes the ability to deploy without construction and hence there is little to no disruption to tenants, guests, or employees. In addition Wave Tunnel provides:

• The ability to be deployed in a ring or pt to pt-to-pt topology
• Our proprietary VineOS for resilient ring support
• Deployment of a high-speed Ethernet backbone in hours
• Nodes that automatically connect once configured
• The ability to be installed flush with the ceiling
• Three layers of security for your traffic

MECHANICAL

Dimensions	275mm x 237mm x 114mm (10.2" x 9.3" x 4.5") (not including bracket)
Weight	5 lbs 8 oz (2.5 kg) (not including bracket)
Enclosure Materials	ABS/PC with aluminum heatsinks
Mount Material	Zinc-plated steel
Mounting	Ceiling bracket included, other brackets available

HARDWARE

Processor	ARM quad-core 64-bit 1.6GHz
Memory	2GB DDR4 DRAM, 1GB NAND Flash
Networking Interface	4 Gigabit Ethernet ports
RF Connections	2 WaveTunnel radios – one on either side, 802.11b/g/n WiFi for management
Max Power Consumption	27W
Power Method	AC Wall power
Power Supply	External Brick
Supported Voltage Range	85-264VAC, 47-63Hz Universal Supply
Operating Temperature	0 – 40 °C
Certifications	FCC Part 15 Class A, FCC 15.255

LEDs

Power	Green
RF Link 1	Green
Status	Red
Ethernet Connectivity	Green
RF Link 2	Green

SOFTWARE

OS	VineOS™
Operating Mode	PtP
Airvine Specific Features	Integrated dual 60 GHz radios; VineOS
Network	Bridge mode
Services	NTP client, Vine Discovery, Vine Routing
Tools	Antenna Alignment, speed test
Software Management	AirvineMobile, VineManager, CLI, SNMP, REST API
Minimum Software Requirements	Web browser, iOS and Android based smartphone
VLAN Support	Support 4k VLANs

SYSTEM

Maximum Throughput	Up to 2Gbps
Maximum Range	100 meters
Encryption	WPA2-PSK (AES)
PoE Out	4 ports with configurable power settings of 0, 15,30 or 60W. Total allocation maximum is 120W
USB Port for Management	Micro USB

RF

Opterating Frequency	57-71 GHz
GPS	No
Operating Mode	TDD
Modulation	Up to 16QAM
Azimuth Scan Range	±45°
Antenna Gain	21dBi
Channel Support	1 - 6

* Specifications subject to change without notice