

WEIGHT AND DIMENSIONS

0.8 Kg or 1.8 lbs.

197mm x 197mm x 70mm
8 in. x 8 in. x 3 in.

OPERATING TEMPERATURE

-30C to 60C storage
-40C to 70C operating

95% non-condensing

WARRANTY

3 year

ORDERING INFORMATION

vela-2023 (2302-2397 MHz)
vela-2024 (2402-2497 MHz)
vela-2025 (2502-2552 MHz)
vela-2049 (4940-4990 MHz)
vela-2050 (5150-5850 MHz)

The all new Vela radio series is designed for carriers and Internet Service Providers to address the “last-mile” with high performance and reliability. It is so reliable that we are providing an unprecedented warranty of 3 years. The Vela radio series supports VOIP more efficiently than other radios by utilizing Small Packet Optimization (SPO) and it delivers higher throughput of up to 50 Mbps when Throughput Booster Technology (TPB) is utilized. RF output power is software adjustable as well as the distance setting for optimal distance vs. throughput performance.

Vela is surrounded by a compact, outdoor enclosure that is water element resistant and complies to IP68 standards. All components are industrial, not commercial like so many other products. Industrial components meet higher standards allowing the radio to withstand harsh environments as well as extending MTBF performance. It also includes IEC61000-4-5 standard surge protection.

Data encryption such as WEP, WPA-PSK, and WPA/2 (AES-128bit) provide the necessary security as well as having enhanced access control through the use of MAC address filtering both on the Access Point and Client ends.

Product Highlights

- Throughput Booster Technology

While other radios claim data rates of up to 54 Mbps, what they don't tell you is the effective data rate. 50% of 802.11 a/b/g data packets is overhead and the other half is the actual data you receive. This means the effective data rate is about half of the 54 Mbps they claim. The Vela is no exception. However with TPB, we nearly double that rate allowing you to receive effective data rates up to 50 Mbps. All this and without increasing the channel size.

- Small Packet Optimization

SPO technology within the Ethernet controller increases performance up to 400%.

- QoS for TDM (E1/T1) over IP

Vela has the ability to transmit TDM packets over IP when the QoS function is enabled. It can also support TDM prioritization.

- 108 Mbps Turbo Mode

Vela supports multiple channel bandwidth options depending on your needs. 5/10/20/40 MHz channel sizes are available. A 40 MHz channel size supports speeds up to 108 Mbps!

- Warranty

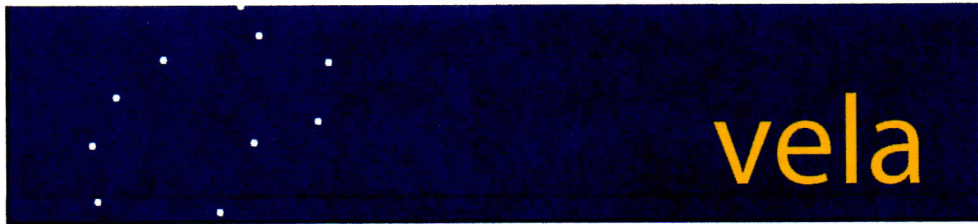
Vela carries a 3 year warranty. That's how confident we are in this product. Who else can offer this without having to pay for extended warranties?

Phone: 1 949 215 6277

Web: wirelessinteractive.com

note that all specifications are subject to change without notice

no limits



Specifications

Operating Frequency	2302 to 2562 MHz or 4900 to 5850 MHz (see order information)
Channel Bandwidth	Software selectable. Channel bandwidth, 5/10/20/40 MHz wide
Output Power	18 dBm @ QAM-64 19 dBm @ QAM-16 20 dBm @ QPSK 20 dBm @ BPSK tolerance of 2 dBm
Receiver Sensitivity (BER 1E10-6) 5 MHz channel size	-71 dBm @ QAM-64 -81 dBm @ QAM-16 -84 dBm @ QPSK -89 dBm @ BPSK tolerance of 2 dBm
Modulation / Data Rate Range / Distance	OFDM - Up to 108 Mbps data rate Up to 30 Km (antenna dependent)
Ethernet	IEEE 802.3 (10 BASE-T / IEEE 802.3u (100BASE-T)
Web-based SNMP Agents	V1, V2c
Password Access Control	2 Levels
Operating System	Windows 98/2000/NT/XP
Network Architecture	PTMP , Base Station, or PtP Bridge
Bandwidth Management	Available
VLAN Transparent	Available
Data Encryption (64/128/152 bits)	WPA, 802.1z Auth., (EAP)
Authorization	MAC address access and protocol filter
Additional Security	Disable broadcast of SSID, Wireless Isolation
VOIP Packets	Prioritization
Small Packet Transmits	Available (400% throughput performance @ 64 bytes)

RFC 2544 testing by SmartBits. - IEEE 802.11 Standard WiFi Radio

Frame Size	64 Bytes	128 Bytes	256 Bytes	512 Bytes	1024 Bytes	1280 Bytes	1518 Bytes
Pass Rate	2.1 Mbps	4 Mbps	7.3 Mbps	13.8 Mbps	19 Mbps	20.5 Mbps	24.5 Mbps
Latency	2 ms	2 ms	2 ms	2 ms	2 ms	2 ms	2 ms

RFC 2544 testing VELA (with Throughput Booster)

Frame Size	64 Bytes	128 Bytes	256 Bytes	512 Bytes	1024 Bytes	1280 Bytes	1518 Bytes
Pass Rate	2.3 Mbps	4.6 Mbps	8 Mbps	16.5 Mbps	31.8 Mbps	32.5 Mbps	47 Mbps
Latency	2 ms	2 ms	2 ms	2 ms	2 ms	2 ms	2 ms

RFC 2544 testing VELA (Small Packet Optimization and Throughput Booster)

Frame Size	64 Bytes	128 Bytes	256 Bytes	512 Bytes	1024 Bytes	1280 Bytes	1518 Bytes
Pass Rate	9.5 Mbps	13.7 Mbps	18.5 Mbps	20.5 Mbps	24 Mbps	29 Mbps	41 Mbps
Latency	2 ms	2 ms	2 ms	2 ms	2 ms	2 ms	2 ms

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