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Liberator-V100
The future of wireless backhaul

Liberator-V100

Applications

Small Cell Backhaul

Wireless Video Surveillance

Campus Connectivity

Highlights

No interference & Quick installation

Smallest Form Factor

Optimized for street level deployment

All-Outdoor invisible footprint

Robust Aluminium Housing

100 Mbps Full-Duplex (FDD)

SyncE & 1588 Compliant

Optional 256 bit AES encryption

About 60 GHz

The 60GHz band is license-free or license-exempt in most countries. Due to Oxygen Absorption it is possible to operate without interference issues, even when deploying links in close proximity to each other. Large networks can be deployed and operate at extremely high densities with tens of links deployed on a single roof top or street. Sub10's combination of narrow beam width and high quality construction, gives the Liberator series outstanding performance and excellent frequency reuse.

60 GHz Wireless Backhaul for Small Cell Backhaul & Enterprise Connectivity

The Liberator V100 is an extremely versatile and cost effective all-outdoor wireless ethernet link operating in the 60 GHz Band delivering a Full-Duplex bandwidth of 100 Mbps for distances up to 1.2 km. Optimized for invisible street level deployments, the v100 provides an ideal solution for challenging high-density applications such as Small Cell Backhaul, Campus Connectivity & Wireless Video Surveillance.

The high-gain antenna has particularly low sidelobes giving excellent interference immunity, and allowing multiple co-located units on a single pole overcoming pole sway, twist and/or tilt. The patent-pending "Snapback" SyncE allows rapid synchronisation in just a few seconds, and the future-proof programmable platform allows new features to be added as Carriers & Enterprise requirements change in the future. The Liberator v100 is an easy to deploy and flexible wireless backhaul solution designed to meet the highest reliability requirements.

For more information please contact us!
www.sub10systems.com

Technical specifications for V100

Frequency Bands	57 - 64 GHz Band
Modulation	QPSK
Range QPSK	up to 1200 metres
Ethernet throughput	100 Mbps (full duplex, QPSK)
Max Tx Power	+8 dBm (QPSK)
Max EIRP	46 dBm
Sensitivity	-70 dBm (QPSK)
Channel width	100 MHz
Antenna gain	38 dBi
Link adaptation	Adaptive coding & modulation, ATPC
Interference immunity	Channel switch capability
Availability	Up to 99.999% (use Sub10 Link Availability Calculator)
MTBF	25 years
Wind load	160 km/h (operating) and 200 km/h (survival)
Ethernet frame size	64 bytes up to 2048 bytes
Latency	< 250 microseconds
Synchronisation	SyncE, IEEE 1588v2, patent pending snapback technology
VLAN for management	IEEE 802.1Q
QoS	Flow control, 802.1p, DiffServ, 8 queues
Network management	SNMP v1, v2c, v3
GUI	HTTP web-browser
Encryption	AES-256 activated by Licence Key
Connector	RJ-45 (outdoor gigabit Ethernet seal kit included)
Voltage alignment port	Waterproofed QMA socket
ODU Terminal size	182 x 182 x 68mm
Weight	2,5 kg
Power supply	Power Over Ethernet ("Ultra-PoE" / PoE++), consumption 30W
Operating temperature	-40°C to +55°C

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