Fraunhofer FOKUS

01
2014

WiBACK

WiBACK Node-2-Connect
(Repeater Node v3)
Datasheet

At a Glance

Developed by Fraunhofer FOKUS, the WiBACK technology offers a flexible, self-managing and a cost efficient solution to provide carrier-grade wireless back-haul coverage based on IEEE802.11 hardware.

WiBACK is designed to deliver services providing a high quality of experience. It efficiently bridges the gap between end-users and provider core networks. Sophisticated algorithms dynamically manage the entire backhaul network with respect to topology planning and load distribution. Compared to traditional fixed wireless operator back-haul technologies, the key WiBACK features lead to significantly lower setup (CAPEX) and operational costs (OPEX).

Contact

info@wiback.org
www.wiback.org

Fraunhofer Institute for Open Communication Systems
Schloss Birlinghoven
53754 Sankt Augustin

+ 49 2241 14 2103
www.fokus.fraunhofer.de

WiBACK Fraunhofer FOKUS

WiBACK Key Features

- Carrier-Grade Services (Low Latency & Prioritized Voice) via MPLS
- Transparent Ethernet Bridging incl. VLAN (IEEE802.1q) Trunking
- Self-Management/-Healing/-Maintenance
- Low Energy Footprint, Solar-Ready
- Network Monitoring
- End-to-End Encryption
- Multi Node Support (Clustering of multiple nodes via Ethernet)

WiBACK Node-2-Connect Facts

Interfaces	
2 x RJ45	10/100Tx Ethernet
	Serial RS232
2 x Wireless LAN	High power backhaul interfaces
System	
Architecture	Embedded Linux, x86
	Lower Power AMD Geode 500MHz/256MB
WLAN backhaul radios	
Type	Atheros chipset, IEEE802.11a/g/n, 2x2 MIMO, 20/40 MHz
Frequency range	2.400 - 2.472 GHz or 5.180 - 5.800 GHz unlicensed
	400-900 MHz, or 3.x GHz licensed (optional)
Output power/ sensitivity	Up to 25 dBm / -97 dBi
Physical	
Dimensions / weight	200 mm x 140 mm x 76 mm; 1.4 kg
Enclosure	NEMA-4, IP65, Aluminum, weather and UV Protected,
	4x antenna N-Type female, outdoor,
	mast mounting kit included
LED	Power and status signaling
Power	
Supply	Passive PoE, 7-20 V,
	Solar-Power ready
Consumption	Maximum 9 W, average 6 W
Optional	Fully integrated solar charger