

FRAUNHOFER-INSTITUTE FOR APPLIED INFORMATION TECHNOLOGY FIT





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 endusers 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).

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WIBACK NODE-2-CONNECT II DATASHEET

WiBACK Key Features

- Carrier-Grade Services (Low Latency & Prioritized Voice) via MPIS
- Transparent Ethernet Bridging incl. VLAN (IEEE802.1q) Trunking
- Self-Management/-Healing/-Maintenance, Network Monitoring
- Low Energy Footprint, Solar-Ready
- End-to-End Encryption (AES-128)
- Multi Node Support (Clustering of multiple nodes via Ethernet)

WiBACK Node-2-Connect Facts

Optional

Interfaces	
1 x RJ45	10/100/1000Tx Ethernet
2 x Wireless LAN	High power backhaul interfaces
System	
Architecture	Embedded Linux, x86
	Low Power AMD APU 1GHz/1GB
WLAN backhaul radios	
Туре	Atheros chipset, IEEE802.11a/n, 2x2 MIMO, 20/40 MHz
Frequency range	5.180 - 5.800 GHz unlicensed
	400-900 MHz, 2.4 GHz, or 3.x GHz licensed (optional)
Output power/ sensitivity	Up to 30 dBm / -96 dBi
Output power/ sensitivity Physical	Up to 30 dBm / -96 dBi
	Up to 30 dBm / -96 dBi 300 mm x 236 mm x 72 mm; 2.1 kg
Physical	
Physical Dimensions / weight	300 mm x 236 mm x 72 mm; 2.1 kg
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Physical Dimensions / weight Enclosure	300 mm x 236 mm x 72 mm; 2.1 kg NEMA-4, IP65, Aluminum, weather / UV Protected, 4x antenna N-Type female, outdoor, mast mounting kit included 50-70mm
Physical Dimensions / weight Enclosure LED	300 mm x 236 mm x 72 mm; 2.1 kg NEMA-4, IP65, Aluminum, weather / UV Protected, 4x antenna N-Type female, outdoor, mast mounting kit included 50-70mm

Solar charger