



Discover the Experience

# The Wireless Communication Solution

## EB WLAN Node

EB WLAN Node is a Wireless Communication Solution for backbone and mobile installations in harsh environment applications like public transportation or industrial data/video communication. It supports the IEEE 802.11 networking standards, thus ensuring high data rates and reliable communication.

The WLAN Node supports a wide variety of applications, including for example control and maintenance, wireless voice communication and wireless video. Once the initial configuration is done, the WLAN Node can be remotely managed using a standard Web browser or SNMP management tools. The WLAN Node is available in two product variants, a Robust IP66 and an easy to integrate Light variant.

### Technology

- WLAN Node is based on IEEE 802.11 (WLAN) technology, adapted for special requirements in industrial applications
- Supports both 2.4 GHz and 5 GHz operation
- Antenna diversity with two independent antennas
- Fast hand-off functionality allows continuous coverage streaming applications for control, voice and wireless video purposes
- Excellent performance and flexible installations in harsh industrial environment

### Key Features

- Configurable as Access Point or Client
- Data rates up to 54 Mbit/s
- Better link span based on optimized transmitter and receiver performance and MAC layer modifications
- Web-based HTTP and SNMP user interfaces offering support and maintenance over wired and/or wireless networks
- Supports remote updates for device settings and firmware downloads
- Secure wireless access based on WEP and WPA2 security scheme
- Outdoor-proof solution



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<b>Type</b>	WLAN Node, DT30 Series
<b>Functionality</b>	Wireless communication for industrial and outdoor applications
<b>Operating Temperature Range</b>	-25...+55 °C, the extended temperature version with -40...+70 °C
<b>Power Feed</b>	12...24 VDC, 12...18 VAC, 2 A max
<b>Wireless Standards Supported</b>	IEEE 802.11b, 802.11g and 802.11a
<b>Frequency Range</b>	2,400..2.4835 GHz 5.150..5.350 GHz, 5.470..5.725 GHz, 5.725..5.850 GHz Optional: Proprietary frequency variants available
<b>Occupied Channel Bandwidth</b>	According to the IEEE 802.11
<b>Data Rates Supported</b>	802.11b: 1Mbit/s, 2, 5.5 & 11Mbit/s DSSS 802.11g & 802.11a: 6Mbit/s, 9, 12, 18, 24, 36, 48 & 54 Mbit/s OFDM
<b>RF Transmit Power (ERP)</b>	+5...+20 dBm, Settable in 3 dB steps in User Interface High power option for special applications: up to +27 dBm @ 2,4 GHz band High power option for selected data rates: up to +24 dBm @ 5 GHz band
<b>RF Antenna interfaces</b>	Two independent antenna interfaces supported, selectable in MMI for ANT1 ANT <sub>2</sub> or combined based on automatic antenna diversity T/R indication supported
<b>Receiver Sensitivity</b>	802.11b: -92 dBm (1 Mbit/s), -89, -86, -84 dBm (11 Mbit/s) 802.11g: -90 dBm (6 Mbit/s), -88, -86, -84, -81, -78, -73, -70 dBm (54 Mbit/s) 802.11a: -90 dBm (6 Mbit/s), -88, -86, -84, -81, -78, -73, -70 dBm (54 Mbit/s)
<b>Security</b>	WEP, WPA2 MAC address filtering supported NAT Router and Firewall
<b>Ethernet Interface</b>	DT30 Robust: 2 Port Integrated HUB, 10/100 Base-T DT30 Light: 3 Port Integrated HUB, 10/100 Base-T
<b>Ethernet Routing / Networking</b>	DHCP Server/Client
<b>Device Management</b>	HTTP- with user authentication, remote update for device settings and firmware SNMP-V <sub>2c</sub> MIB, with traps



Product variants	WLAN Node, DT30 Light	WLAN Node, DT30 Robust
Physical Dimensions	144 x 100 x 20 mm, without cables	176 x 105 x 53 mm, without cables
Weight	Approx. 0,25 kg	Approx. 0,8 kg
Environmental Protection	IP 20	IP 66
Connectors	RF Antenna Connectors 2* SMA Ethernet Connector: DUBOX Power Feed: DUBOX T/R Indicator: DUBOX	RF Antenna Connectors: 2* N-connector or 2*datachable integrated antennas Ethernet Connector: M12 Power Feed: LEMO 1K T/R Indicator: LEMO OK

### Elektrobit (EB)

EB creates advanced technology and turns it into enriching end-user experiences. EB is specialized in demanding embedded software and hardware solutions for automotive and wireless technologies. The net sales for the year 2006 totalled MEUR 181.5. Elektrobit Corporation is listed on OMX Helsinki. [www.elektrobit.com](http://www.elektrobit.com)