

WLAN Client Adapter for industrial applications

bintec WI-Client

- DIN rail mounting and wall mounting included
- Protection class IP40, extended temperature operating
- Dual band radio 2.4 / 5 GHz (802.11agbh)
- Ethernet 10/100 Mbps
- V.24 interface for data transmission via WLAN
- Approval for usage in vehicles (E1)
- Encryption WPA, WPA2

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The WI-Client creates WLAN connections between devices or machines with an Ethernet port or RS-232 interface and WLAN networks (802.11a/b/g/h). Typical uses for the WI-Client include a broad range of industrial WLAN applications.

Product description

- Small form factor (105x125x40 mm)
- Enables wireless connection of RS232 device

The bintec WI-Client is intended to connect devices with ethernet or serial interfaces to a Wireless Local Area Network (WLAN) corresponding to the 802.11 a/b/g/h standard. Typical application for the bintec WI-Client is the wide range of industrial application such machine to machine communication or mobile environment, i.e. a forklift.



The WI-Client connects over the ethernet interface all devices in its LAN segment with a LAN that is accessible over WLAN. In those scenarios all bintec Access Point are suitable for use.

The bintec WI-Client can receive and transmit data over it's serial port which are exchanged over LAN or WLAN with other devices, i.e. another WI-Client. The implementation of the serial interface is also compatible with the bintec Wlx040 and Wlx065 series.

Variants

bintec WI-Client (5510000169)	WLAN Client adaptor for industrial applications, IEEE802.11a/b/g/h, 1 x ETH, RS232 data interface. 2 ext. RSMA antenna sockets, WPA, WPA2, 802.1x, 2 x standard omni antennas, DIN-Rail and wall mounting
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Features

Wireless LAN	
Encryption WEP/WPA	WEP64 (40 bit key), WEP128 (104 bit key), WPA Personal, WPA Enterprise, WPA2 Personal, WPA2 Enterprise
IEEE802.11i Authentication and encryption	802.1x EAP-PEAP, 802.1x EAP-LEAP, 802.1x EAP-TLS, 802.1x EAP-TTLS
Automatic Rate Selection (ARS)	Avialable
Transmission speed	Automatic fall back or fixed transmission speed
Fixed bitrate	A fixed value for the transmission speed can be set

Wireless LAN	
Data rates for 802.11b/g (2,4GHz)	54; 48; 36; 24; 18; 12; 9; 6 Mbps (OFDM modulation). 11; 5.5; 2; 1 Mbps (DSSS modulation)
Data rates for 802.11a/h (5GHz)	54; 48; 36; 24; 18; 12; 9; 6 Mbps (OFDM modulation)
Output power	Selectable 1, 3, 5, 10, 15, max. (18) dBm. The maximum output power varies according datarate and frequency band.
Channel setting	According IEEE 802.11d
Antenna diversity	Can be switched on / off
Wireless mode	Infrastruce mode: For connection to Aps, i.e. W1002 or other APs. Ad-hoc mode: For connection to other WI-Clients (Bridge)
802.11 modes	Compatibly modes: 802.11b only, 802.11g only, 802.11b/g mixed mode, 802.11a/h
AP Density	No roaming, high, middle, low. Select the accesspoint density to control the behaviour when roaming between APs. The selected value defines the signal threshold where the device starts scanning for other APs.
List of available APs	Include information about MAC address, SSID, Channel, Signal strenght
Country specific settings	Operation channel according the regulatory domain
TPC (Transmission power control)	At 5 GHz operation automatic power regulation supported according EN301893
DFS (Dynamic frequency selection)	Relevant for 5 GHz operation: Implementation is not mandatory for devices there working in client mode. Together with bintec APs the maximum allowed EIRP in 5 GHz operation is 200 mW.
RTS/CTS	RTS/CTS Threshold selectable

Serial	
Interface (mechanical)	RS232 Interface with 9-pole D-sub female connector
Interface (electrical)	300-115,2 kbit/s, RTS, CTS, DSR, DCD, RI
Operation	Data transmission parallel to the Ethernet communication
Handshake mode	XON/XOFF, RTS/CTS or DTR/DSR are local handshake modes. In 'remote mode' the status of the handshake input signals (DSR+CTS) will be send to the remote side via an extra port.
Port Mode	TCP/IP server; TCP/IP client; UDP/IP; Printer server; Com Server. The TCP/IP server and client mode is compatible to the implementation of the Wlx040 and Wlx065 Access Points. The Com Server mode is compatible to some PC applications.

Software	
Cloning mode (I)	This feature controls the MAC Address of the Bridge as seen by other devices (wired or wireless).
Cloning mode (II)	If set to 'Ethernet Client (var)', the MAC Address from the first Ethernet client that transmits data through the Bridge will be used. This setting is useful if there is only one Ethernet device connected to the Bridge.
Cloning mode (III)	If set to 'Ethernet Client (fixed)', the MAC Address that is given in the Parameter 'Fixed Client MAC' will be used. If set to 'WLAN Card', the MAC Address of the WLAN Card will be used.
DHCP Relay Agent	Can switched on/off

Maintenance

Configuration and Setup	Via Webinterface
Supervision and Recovery	Supports the Compoint manager to detect the device on the LAN and mangaging the device IP address. Reset Button to set the device back to defaults
Configuration Management	Via Configuration File up and download

Hardware

LAN Interface	10/100 Mbit/s Ethernet Twisted pair, autosensing, MDI/MDI-X
R232 Interface	R232 Interface with 9-pole D-sub female connector
Antenna socket	2x RP SMA socket
Antenna	Two Swivel Omni 2dBi antennas with RSMA socket include
Power supply	Requires 9 - 35VDC / 3W via a Circular M8-3pin connector with screw locking. The cable is including.
Status LED	On, WLAN, LAN, Ser1
Mounting	Wall mounting include, DIN Rail Mounting include
Housing	Aluminum
Dimensions	105x125x40 mm
Weight	470 g
Environment	Operation 0-70°C IP40 protection class
Certification	EN60950-1, EN301489-1, EN301489-17, EN301893, EN50371. FCC Class A digital device, pursuant to Part 15 of the FCC Rules, E1 licence for the operation in motor vehicles

Accessoires

Add-ons

PS-EURO-Rxxxx/WI-Series (01503)	Power supply EURO for R1200/w/wu, R3x00/w, R4x00, WI series, WI-Client (24V DC, 1A)
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