WLAN HGW Base Station
BWH 001

The BWH 001 base station acts as a gateway and establishes a connection between an HGW and a machine control. Depending on the S-DIAS controller used (e.g. CP/SCP 111), both safety data (via black channel) and non-safety data can be transmitted redundantly. In addition, the BWH 001 serves as a receiving and charging station for the HGW.

The signal lamp allows a simple coupling between HGW and machine. States can be made visible via programmable pictogram LEDs. The base station can also communicate with other controllers over an Ethernet interface.

Performance Data

Processor	EDGE2 Technology
Processor cores	1
Internal cache	32-kbyte L1 Instruction Cache 32-kbyte L1 Data Cache 512-Kbyte L2 Cache
Internal program and data memory (DDR3 RAM)	256-Mbyte
Internal remnant data memory	no
Internal storage device	1-Gbyte microSD card
Internal I/O	no
Interfaces	1x magnetic connector for charging the battery 1x M12 connector supply and Ethernet 1x M12 connector Ethernet 1x USB 2.0 Type-C (Dual Role Port) 1x WLAN dual-band (2.4 GHz, 5 GHz simultaneously)
Status LEDs	1x Power 1x HGW-Link (freely programmable) 2x Network (freely programmable) 1x application-/RUN-LED
Signal generator	no
Cooling	passive (fanless)
Coupling confirmation	signal light
Input voltage measurement	no

Electrical Requirements

Supply voltage	typically +24 V DC (SELV/PELV)	
	minimum +20 V DC	maximum +30 V DC
Protection class	3	
Inrush current	16.1 A for 1 ns	
Current consumption of +24 V power supply	ca. 200 mA in CLI maximum 2.5 A charging at full capacity at +24 V	
USB Host current load	maximum 0.5 A	

Environmental Conditions

Storage temperature	-5 ... +60 °C	
Environmental temperature	0 ...+50 °C	
Humidity	10-95 %, non-condensing	
EMC resistance	EN 61000-6-2 (industrial area)	
EMC noise generation	EN 61000-6-4	
Shock resistance	EN 60068-2-27	150 m/s²
Vibration resistance	10 m/s²	
Protection type	EN 60529	IP54
Free fall (with packaging)	IEC 60068-2-32	500 mm

WLAN 2.4 GHz

Frequency range	2399.5-2484.5 MHz
Transmission power max.	20 dBm (100 mW) EIRP
Channels	1-13 (2412-2472 MHz)
Standards	IEEE 802.11 b/g/n

WLAN 5 GHz

Frequency range	5150-5350 MHz 5470-5725 MHz
Transmission power max.	23 dBm (200 mW) EIRP
Channels	36-48 (5180-5240 MHz) 149-165 (5745-5825 MHz)
Standards	IEEE 802.11 a/n/ac

Antennae

Number	2
Frequency range	2.4/5 GHz
Transmission power max.	25 W
Antenna gain	2.4 GHz-4 dBi Peak Gain 5 GHz-5.2 dBi Peak Gain
Impedance	50 Ω
Transmission angle/ characteristics	transmission characteristics: omnidirectional Polarization: linear

Article Number and Miscellaneous

Article number	12-246-001
Approvals	CE, UKCA
Dimensions	175 x 267.4 x 52.9 mm (W x H x D)
Material	housing: steel color: RAL7024 (powder coated) front: plexiglass
Weight	typically 1.55 kg

Notes