Specifications

	HW 8612 Twin Port	8614 Ethernet Base Station	HW 8615 Serial Port	HW8617 USB Base Station
Dimensions	Approx. 145 x 88 x 46 mm			
Weight	160 g, approximate			
Temperature range	0 to +55 °C operating			
Storage temperature	0 to +70 °C			
Power supply	External 6 to 10 V DC/300 mA through 3-pole DC socket	External 7.5 to 30 V DC, 2 W through 3-pole DC socket	External 7.5 to 30 V DC, 1.2 W through 3-pole DC socket	500 mA max., USB bus-powered
Data rate	230.4 kbit/s max.	500 kbit/s max.	230.4 kbit/s max.	500 kbit/s max.
Range	Typ. up to 300 m (outdoor), typ. up to 60 m (indoor), max. 1800 m under ideal conditions			
Data Interface	2 serial V.24 interfaces (D-Sub-9, male/female)	Network connector Ethernet 10 Mbit/s (RJ45, 10Base-T)	Serial V.24 interface (RJ45, 10-pin)	USB device USB type B receptacle
Antenna system	Integrated antenna 0 dBi, omnidirectional, linear polarisation			
External antenna connector	SMA type (1.88 GHz/DECT only)	SMA type	SMA type (1.88 GHz/DECT only)	SMA type (1.88 GHz/DECT only)
Operational elements	1 push button, 2 LEDs			
Housing	ABS plastic housing, suitable for wall mounting or desktop installation			
Accessories	EU/UK/US Power supply unit Data cable D-Sub-9 male/female	EU/UK/US Power supply unit	EU/UK/US Power supply unit Data cable RJ45 to D-Sub-9	USB Cable 1.5 m
Accessories (opt.)	Swivel Antenna 2 dBi 0-45-90° (Order No. E18374, 1.88 GHz/DECT versions only)			

	Integrated HW 86012 DECT Module	Integrated HW 86022 FHSS/AFH Module
Dimensions	Approx. 52 mm x 37 mm x 3,2 mm	
Weight	8 g	
Temperature range	-20 °C to +60 °C operating	
Operating voltage	3.1 V to 3.5 V DC for digital part, 3.0 V to 4.6 V DC for radio frequency part	
Overall current consumption	12 mA @ Idle, 70 mA @ 26 kbps, 110 mA @ 115.2 kbps, 300 mA @ 500 kbps	
Frequency range	1.880 to 1.900 GHz, 1.870 to 1.930 GHz opt. (exclusively allocated DECT band)	2.400 to 2.483 GHz (ISM band)
Transmit power	Max. 24 dBm (250 mW)	Max. 20 dBm (100 mW)
Receiver sensitivity	-93 dBm typ.	-90 dBm typ.
Modulation	0.5 GFSK (Gaussian Frequency Shift Keying)	
Air data rate	1.152 Mbit/s	
Data rate	up to 500 kbps	
Range	Up to 300 m (outdoor), up to 60 m (indoor)	
Antenna system	2 miniature coaxial connectors, diversity support, 1 integrated antenna 0 dBi, omnidirectional, linear polarisation	
Media access	MC/TDMA/TDD 10 channels, 24 timeslots, 10 ms frame	MC/TDMA/TDD/FHSS (adaptive) 45 channels, 24 timeslots, 10 ms frame
Standards	EN 300 175	
Certification	EN 301 406 EN 60 950-1 ETS 301 489-1, -6	RSS 210 FCC part 15
Approval	ETSI (EU)	FCC (US), IC (Canada)
Interface	50-pin system interface	
Data interface	RS-232, 3.3V, up to 230.4 kbps, RTS/CTS Handshake	
Modem lead signals	RTS/CTS, DTR/DSR, DCD, RI	
I/O interface	General purpose I/O pins	
Analogue interface	Microphone, speaker, ringer	
Other interfaces	PCM, I²C, SPI bus interface	
Data modes	Point-to-point, CLDPS networking with TCP/IP, PPP and SWAP	
Software access	via configuration mode, download mode	

HW 86xxx Series - DECT / ISM-AFH

Wireless Transceiver Modules and Terminales at 1.88 and 2.4 GHz

Wi-Fi doesn't satisfy?

The wireless solution that works where Wi-Fi fails

- Assertive connectivity even in Wi-Fi polluted areas
- Cable-alike robustness in *any* RF environment
- Multi-purpose adaptability – long term availability
- Flexible – configurable – customizable

Wireless Embedded Networking

- Scalable Server/Client scenarios
- Roaming capability
- TCP/IP stack onboard
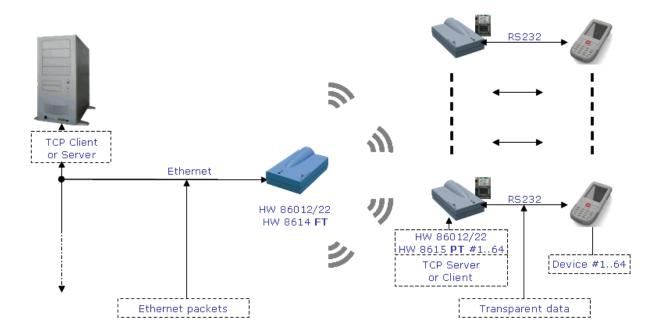- Ethernet / USB / RS-232 terminals ready-for-use

DATA UNWIRED

Flexible configurability supporting versatile scenarios

- Both point-to-point and point-to-multipoint mode
- Broadcast mode
- Datagram mode
- Data streaming mode
- TCP/IP stack onboard
- PPP dial-in support
- HDLC support
- No drivers required!

The scalable solution for the markets of

- Industrial automation
- Measurement and control
- Medical technology
- Automotive
- Voice Intercom
- Security service
- Rescue service
- Maintenance

RS232

DECT/
FHSS

RS232

HW 86012/22
HW 8615 **FT**

HW 86012/22
HW 8615 **PT**

Transparent data

Transparent data

PT 2
HW 86012/22

PT 3
HW 86012/22

PT 1
HW 86012/22

HW 86012/22 **FT**

PT 4
HW 86012/22

PT 5
HW 86012/22

Devices PT #1..5:
Analogue voice data

32 kbit/s ADPCM data

Point-to-point scenario using transparent mode
- Serial cable replacement
- Either connection oriented or connectionless
- Data transmission rate up to 512 kbit/s
- Packet-oriented, transparent on both sides

Point-to-multipoint voice transmission
- 1 FT with up to 5 PTs, mixed signals
- Connection-oriented, transparent on all sides

RS232

TCP Client
or Server

Ethernet

HW 86012/22
HW 8614 **FT**

RS232

HW 86012/22
HW 8615 **PT** #1..64

TCP Server
or Client

Device #1..64

Ethernet packets

Transparent data

Point-to-multipoint scenario using TCP/IP
- Up to 64 PTs with a total transmission rate of up to 512 kbit/s
- PT working as either TCP Client or Server
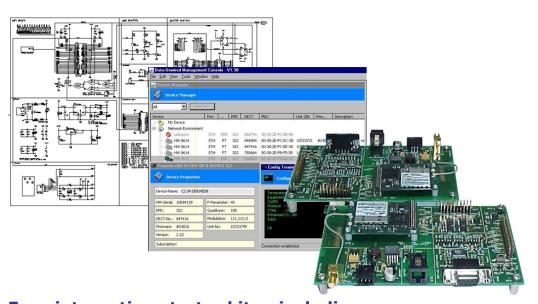- (TCP counterpart on LAN required)

Easy integration starter kits - including
- Modules and integration boards
- Schematic samples
- Management software
- Both hard- and software integration support
- Configuration and management software