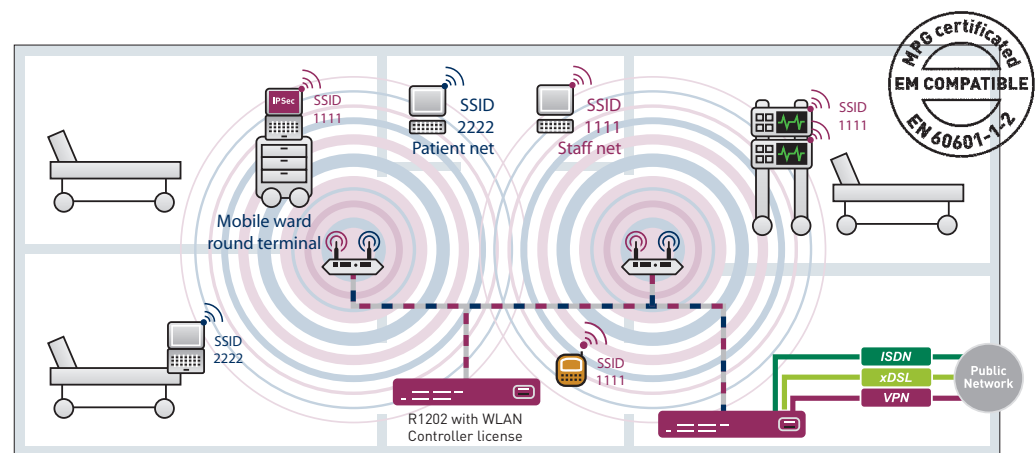


## Application Sheet

# Hospital / Mobile Ward – WLAN

With the introduction of the performance-oriented flat-rate remuneration system based on the DRGs (Diagnosis-Related Groups) in hospitals, remuneration is only granted for those medical measures that have been recorded for the individual patient in the HIS (Hospital Information System). For this reason, the rendered medical services need to be recorded in the HIS in real time, if possible. However, this is only possible if the data is entered directly during the medical ward or shortly after the examination.



*The simultaneous operation of several virtual WLAN networks with individual IDs (SSID) and individual security levels permits the security-relevant separation of the data links into a patient and a staff network.*

### Advantages:

- ▶ MPG-certified according to EN 60601-1-2
- ▶ Highest security level attained for data transfer
- ▶ Secure handling of individual user groups thanks to multi-SSID and VLAN
- ▶ Integration of WLAN-capable medical diagnostic equipment
- ▶ Extended protection class IP40 available with the WI series
- ▶ Power over Ethernet according to IEEE 802.3af
- ▶ Access points with up to two radio modules for WLAN backbone
- ▶ Optional: bintec WLAN Controller for automatic configuration, maintenance and controlling

### Solution:

The solutions are mobile ward and digital patient file. The installation of a wireless LAN infrastructure allows the capturing of patient data at any place and time. Further advantages of a WLAN are e.g. that patients can be provided with Internet access and that mobile end devices (e.g. x-ray devices) can be connected.

The access point W1002n and the access points of W1x040n product familie of Teldat have been specially licensed for the use in medical institutions. The EN 60601-1-2 certificate attests the access points' electromagnetic compliance (EMC), necessary for the use in medical institutions. This makes sure that sensitive medical diagnostic equipment is not affected and continues to deliver reliable measurement results. To ensure maximum security, different access, security, and encryption settings are available.

**WLAN antennas:** The WLAN antenna portfolio of Teldat constitutes in every situation an optimum supplement to the access points with external antenna ports.

# Application Sheet Hospital / Mobile Ward – WLAN



## PROJECT REFERENCES:

### Excerpt

- ▶ Medizinische Hochschule Hannover (Hannover medical school)
- ▶ Klinikum Landshut (Landshut clinical center, see also press release dated 2007/10/10)
- ▶ Klinik Öschelbronn gemeinnützige GmbH (Öschelbronn clinical center, non-profit limited company)

## WLAN ACCESS POINTS:

### bintec W1002n

- ▶ One radio module (2.4 GHz and 5 GHz) per access point with up to 300 Mbps
- ▶ Up to 8 virtual access points per radio module (multi-SSID)
- ▶ Voice Ready for Voice over WLAN applications
- ▶ Usage of offset antennas
- ▶ IEEE 802.11a(h)/b/g/n
- ▶ PoE-capable (IEEE 802.3af)



### bintec W1x040n

- ▶ Like W1002n, in addition:
- ▶ Up to 2 radio modules per access point
- ▶ Protection class IP40 available
- ▶ Wireless connection of serial devices
- ▶ Extended temperature range (-25°C to +65°C)
- ▶ Up to 2 physically independent access point/bridge links
- ▶ SFP Fiber connection

Model	bintec W1002n	bintec W11040n	bintec W12040n
Art. no.	5510000165	5010590006	5010590007
WiFi standard	a/b/g/h/n	a/b/g/h/n	a/b/g/h/n
Number of radio modules	1	1	2
IP protection class	-	IP40	IP40

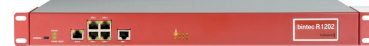
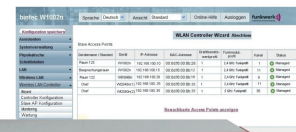
## WLAN MANAGEMENT SYSTEM:

### bintec WLAN Controller

The WLAN Controller automates administrative tasks, which are necessary for a smooth operation of WLAN infrastructures.

- ▶ Installation of a wireless network in 30 minutes without special WLAN know-how
- ▶ A wizard leads in only 5 steps through the installation.

- ▶ Designed for installations from 2 up to 150 Access Points (APs)
- ▶ Up to 6 APs no dedicated hardware is necessary, the license runs on a master AP.
- ▶ For 7 up to 72 APs is needed a bintec router as dedicated controller hardware (e. g. R1202), for 73 - 150 APs a RXL12500 is required.
- ▶ Integrated HotSpot functionality (optional)



- ▶ Roaming-capable wireless network, able for VoWLAN telephony – 'Voice Ready'.

## SUPPLEMENTARY COMPONENTS:

### Indoor Mimo Ceiling Antenna

This antenna is used for 2x3 Mimo 802.11n Access Points (e.g. W1002n) as inconspicuous ceiling antenna.

- ▶ ANT-Ceiling-Mimo-2G
- ▶ 2.4 - 2.5 GHz
- ▶ 9 - 10 dBi gain
- ▶ IP20 Indoor



### packetalarm UTM series

Unified threat management permits the separation of the network traffic when operating mixed networks (company LAN, guest LAN), avoidance of internal attacks and intrusion detection and prevention for the company network.

See also application sheet 'Professional Network Protection with UTM'.



### Teldat HotSpot Solution:

If you provide your customers with a public WLAN HotSpot for Internet access, either free of charge or as fee based service, this constitutes an attractive service offer for your customers.

- ▶ Efficient, fast, and conforming to the law
- ▶ Configuration as free of charge or as fee based HotSpot



Teldat GmbH  
Suedwestpark 94  
D-90449 Nuremberg, Germany  
Phone: +49 - 911 - 96 73-0  
Fax: +49 - 911 - 6 88 07 25  
e-mail: info@teldat.de  
Internet: www.teldat.de