WLAN Access Point
Series 8265

06316E00

- This compact WLAN access point enables data transmission from PDA, notebook and terminals in hazardous areas.
- Robust aluminium enclosure
- Ingress protection IP66
- Ambient temperature from - 30 ... + 60°C
- Standard: IEEE 802.11a//g
- Can be customised, e.g. installation of a customer-specific WLAN access point or other radio technologies
- Optional Ethernet connection via fibre optic cable (Ex op is)

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The WLAN access point enables wireless data transmission in hazardous areas. This includes, for example, accessing data on company networks, transferring data or controlling processes via the WLAN interface of a PDA or a notebook.
The WLAN access point made by R. STAHL is characterised by a compact design, an easy installation and a robust enclosure suitable for industrial use. Its wide temperature range allows its use in almost all surroundings.
This device complies with the widely used IEEE 802.11a/b/g standard and can therefore be used for many purposes.
We also offer planning, installation and adjustment in addition to the product.

	ATEX					
Zone	0	1	2	20	21	22
Installation in		x	x		x	x

WebCode 8265C

Selection Table

Version	Basic version	Wire-line interface	Antennas	Order number
11308E00 WLAN Access Point Series 8265	• Ex d enclosure 8265/54 • WLAN access point industrial design	Ethernet 100BASE-T	1 external, omni-directional antenna Frequency 2.4 GHz Cable length aprox. 5 m	**8265/ . - . . . External antenna, version 1**
			2 external, omni-directional antennas Frequency 2.4 GHz Cable length aprox. 5 m	**8265/ . - . . . External antenna, version 2**
	• Ex d enclosure 8265/54 • WLAN access point industrial design • Stainless-steel terminal compartment • Fibre optic-media converter	Ethernet 100BASE-FX Ex op is, 1310 nm	1 external, omni-directional antenna Frequency 2.4 GHz Cable length aprox. 5 m	**8265/ . - . . . External antenna, version 3**
			2 external, omni-directional antennas Frequency 2.4 GHz Cable length aprox. 5 m	**8265/ . - . . . External antenna, version 4**

Selection Table - Service Packages

Version	Description	
	Note: Please fill in the questionnaire "Service" and send it to us. Scale and type of the provided services will be defined according to the information on your project.	
Planning	**Planning of the radio coverage using planning software** • Charged at a daily rate • Prerequisite: 2D building plans, better 3D, building materials, specification of desired bandwidth and application • Result: Location of the access points, detailed documentation and quantity structure	**167218 Service package 1**
	On-site testing of the planned radio coverage • Charged at a daily rate • Recommendation for industrial plants • Result: Verified complete radio coverage, incl. detailed documentation and quantity structure	**167218 Service package 2**
Installation	**Set-up / programming** • Project management • Daily rate for 1 technician • Number of days depending on project planning	**167218 Service package 3**
	Assembly / installation • Project management • Daily rate for 1 assembler • Number of days depending on project planning	**167218 Service package 4**
Testing	**Acceptance test** • Verification of the installed WLAN solution • Charged at a daily rate	**167218 Service package 5**
	Travel expenses within Germany are included in the service packages.	
	Additional travel expenses outside Germany • Charged based on kilometres or as accrued	

Explosion Protection

Version	WLAN Access Point Series 8265
Certificates	
Europe (ATEX)	PTB 06 ATEX 1077
Marking	
Europe (ATEX)	
Gas explosion protection	⟨Ex⟩ II 2 G Ex de IIC T6
Dust explosion protection	⟨Ex⟩ II 2 D Ex tD A21 IP66 T80 °C
Installation	in Zones 1, 2 or Zones 21, 22

Explosion Protection

Version	External antenna
Marking	
Europe (ATEX)	
Gas explosion protection	⟨Ex⟩ II 2G Ex e IIC T6 Gb
Dust explosion protection	⟨Ex⟩ II 2D Ex t IIIC T85°C Db IP66

Technical Data

Version	WLAN Access Point Series 8265
Radio technology	
Frequency band	802.11b, g: 2,412 ... 2,472 GHz (ETSI), 2,412 ... 2,462 GHz (FCC) 802.11a: 5,150 ... 5,250 GHz (FCC / ETSI), 5,725 ... 5,850 GHz (FCC)
Radio standards	802.11a, 802.11b, 802.11g, 802.11i
Radio certificate	FCC part 15, ICES-003, class A digital apparatus RTT&E, ETS 300-826, ETS 300-328, EN 60950
Use approved in	USA, Canada, EU, Norway, Switzerland, Russia, Australia, New Zealand further regional approvals on request
Transmission power	up to 50 mW (adjustable)
Data rates (modulation)	802.11b: 11, 5,5, 2, 1 Mbit/s (DSSS - BPSK, QPSK, CCK) 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbit/s (OFDM) 802.11a: 54, 48, 36, 24, 18, 12, 9, 6 Mbit/s (OFDM)
Receiver sensitivity (typical)	- 90 dBm @ 1 Mbit/s - 85 dBm @ 11 Mbit/s - 82 dBm @ 24 Mbit/s - 75 dBm @ 54 Mbit/S
Channel selection	802.11b, g: 1 ... 13 802.11a: 36, 40, 44, 48, 149, 153, 157, 161, 165
Safety / Encoding	WPA2 - 802.11i with 128 bit AES-CCM WPA TKIP, WEP support MAC ID filter administrator password
Antenna diversity	yes (optional)
Operating modes	Access Point, Access Client or Repeater / Bridge
Configuration	via integrated web server
Monitoring	via integrated OPC Server
Interfaces	
Ethernet	versions 1, 2: 10/100BASE-T connection, RJ-45 shielded IEEE 802.3, 802.3u, 802.3x versions 3, 4: 100BASE-FX, Ex op is
Antenna	2 x RP-SMA sockets
Electrical data	
Power supply	
Rated voltage	24 V DC
Voltage range	9 ... 28,8 V DC
Power consumption	6 W
Alternativ optional	Power-Over-Ethernet, AC
Ambient conditions	
Ambient temperature	- 30 ... + 60 °C
Storage temperature	- 40 ... + 80 °C
Relative humidity (no condensation)	≤ 90 %
Degree of protection	IP66
Mechanical data	
Dimensions	see dimensional drawings
Weight	versions 1, 2: ca. 11,9 kg versions 3, 4: ca. 17,6 kg

Technical Data

Version	External antenna
Electrical data	
Radiation	omni-directional
Antenna gain (peak)	5 dBi
Frequency band	2300 ... 2500 MHz
Ambient conditions	
Ambient temperature	- 40 ... + 60 °C
Mechanical data	
Degree of protection	IP66
Length	210 mm
Diameter	38 mm
Weight	365 g
Mounting / Installation	
Cable length	4.50 m

Customer-Specific Version of the WLAN Access Point

If none of the given basic versions suits your needs, we will be glad to develop a customer-specific configuration.
Please fill in the form and enclose it to your request.

General requirements	
Explosion protection	For use in Zone 1 ❒ Zone 2 ❒ Zone 21 ❒ Zone 22 ❒
	Explosion group IIC ❒ IIB ❒ IIA ❒
	Temperature class T6 ❒ T4 ❒ T3 ❒ T2 ❒ T1 ❒
Ingress protection	IP 54 ❒ IP 66 ❒
Paint	(Ex d enclosure) without ❒ with ❒
External, omni-directional antenna	(data see page)
Number	Frequency range 2.4 GHz (standard): 1 ❒ 2 ❒ — 5 GHz: 1 ❒ 2 ❒
Wire-line interface	
Standard	100BASE-T, Ethernet CAT6 cable, direct cable entry ❒
Alternative	100BASE-FX, Fibre optic cable Ex op is ❒
Power supply	24 V DC (standard) ❒ 230 V AC ❒ Power over Ethernet ❒ (for installation in zone 1 only)
Profinet connectors	
100BASE-T (copper CAT6)	
Standard	Direct entry
Alternative	Ex e terminal compartment made of Plastic (series 8146) ❒ Stainless steel (series 8150) ❒
100BASE-FX (fibre optic cable)	
Standard	Terminal compartment ❒
Alternative	Direct entry by means of Compound gland ❒
Installation of customer-specific WLAN access points	Please specify make and type: If you desire installation of a customised WLAN access point, please send us the technical documentation, such as data sheets, operating instructions and dimensional drawings, of this product. Unfortunately, we cannot process your request without this information. In this case, the drawing of the enclosure might differ from the dimensional drawings.

Services

A careful planning and subsequent measurement are absolutely necessary to guarantee trouble-free and safe WLAN operation in industrial environments. R. STAHL offers you numerous services regarding planning, installation and testing of your WLAN in hazardous areas.
This includes:

- Planning of the radio coverage based on building plans, on-site inspections and required bandwidth
- Support and assistance for WLAN access point installation
- Adjustment of the installed radio coverage
- Assistance for implementation into company network

Please answer the following questions so that we can learn about your application in advance and adapt the WLAN solution to your individual requirements.
Please fill in the form and enclose it, together with the above mentioned technical documentation, to your request.

Type of application
(point-to-point connection, infrastructure for implementing WLAN client, production data acquisition, access to LAN / network, terminal - Citrix Client, etc.)

_____

Are there several applications with different safety levels or QoS classes?
(web access, internal access, VoIP / VoWLAN, machine network, VLAN, etc.)

_____

Number of clients
(1-10, 11-30, 31-100, 101-500, 501-1000, 1001-2000, not defined)

_____

Type of clients
(PC, terminal, handheld scanner, cameras, Ethernet client, stapler terminal, etc.)

_____

Movement of the clients and speeds
(firmly installed, portable, mobile, moving or carried, which speeds, etc.)

_____

WLAN clients roaming
(0 ms latency, under 50 ms, under 150 ms, whatever = 500 ms)

_____

WLAN frequency range
(2.4 GHz, 5 GHz)

_____

Covered area, indoor / outdoor
(hospital, warehouse, explosion class, train station, laboratory, conference room, open space, etc.)

_____

Covered area in square metres
(under 1000 m^2, 1000-10000 m^2, over 100000 m^2)

_____

Security level
(open access for everyone, low security with static encryption, high security with dynamic encryption, highest security with dynamic encryption (AES), firewall, restriction of the radio coverage to a certain area, etc.)

_____

Is there already a radio application?
(no; if yes - which one and how is it to be replaced/extended?)

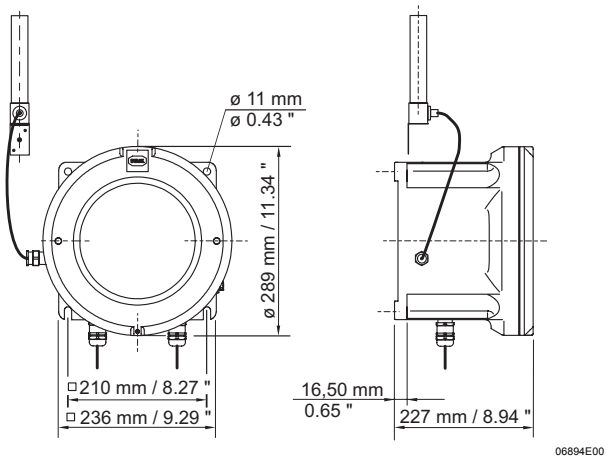
_____

Does the building to be covered already exist? Or is the planning just theoretical?
If the building already exists, we prefer on-site measurement.
In case of a theoretical planning, the radio coverage is simulated using software.

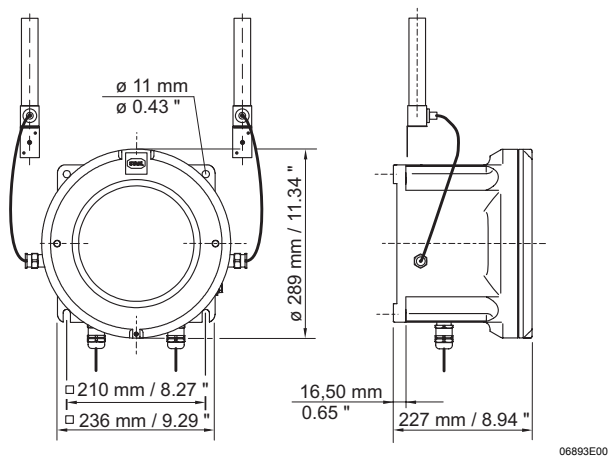
_____

The following documentation is required:
• Building plans (hard copy and digital copy in pdf. format)
• Details regarding materials of walls, ceilings, racks, machines, etc. (only theoretical planning)
• LAN plans

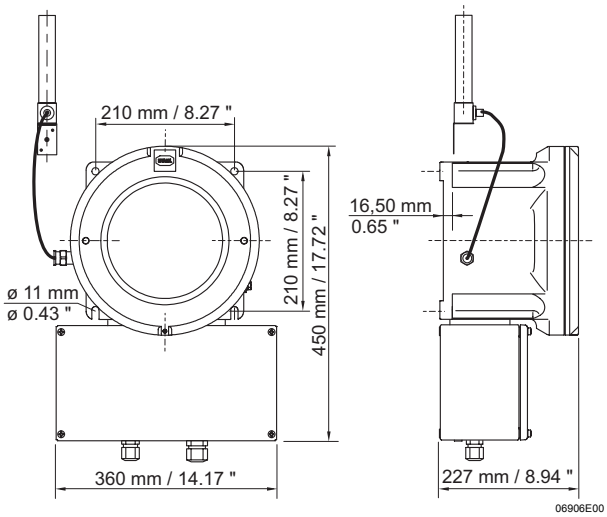
Dimensional Drawings (All Dimensions in mm / inches) - Subject to Alterations



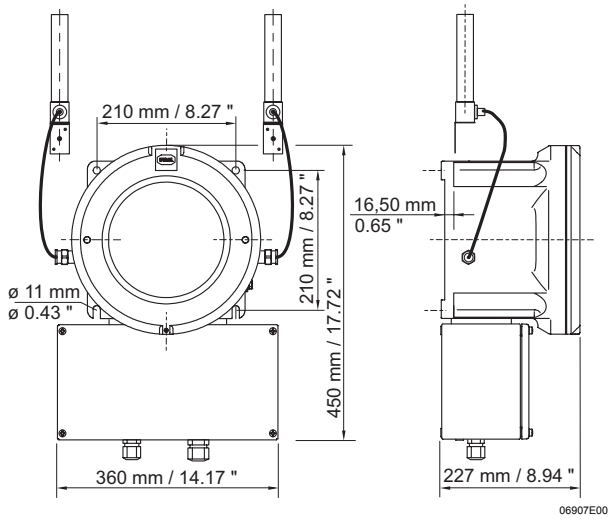
8265, size 4, 1 external antenna, version 1



8265, size 4, 2 external antennas, version 2



8265, size 4 with terminal compartment, 1 external antenna, version 3



8265, size 4, with terminal compartment, 2 external antennas, version 4

We reserve the right to make alterations to the technical data, weights, dimensions, designs and products available without notice.The illustrations cannot be considered binding.