

**WIRELESS ROUTER ACCESS POINT
WITH TAGGING AND TRACKING
WRAP260**

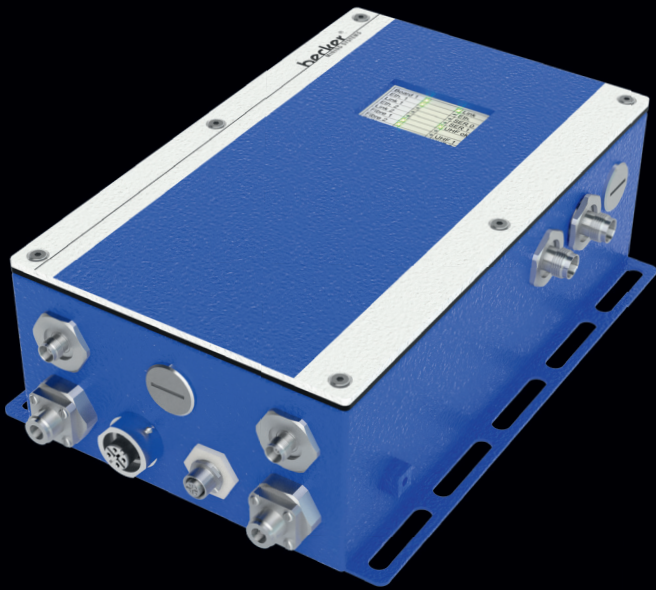
- Intrinsically safe Communication System (ia)
- 3 independent Access Points in one enclosure
- 3 x 300 Mbit/s WiFi
- 4 x 1 Gbit/s fibre Ethernet ports
- 2 Tag readers for Tagging & Tracking (option)
- RS485 Serial interface (option)

WRAP260 ROUTERS

The WRAP260 Routers integrate multiple WiFi access points with Tagging and Tracking functions in one system.

The routers are available as double access point with two Gbit fibre ethernet ports (base version). The high end version is a triple access point with four fibre ethernet ports.

The devices have IP65 or IP67 ingress protection rating for rugged mining applications.

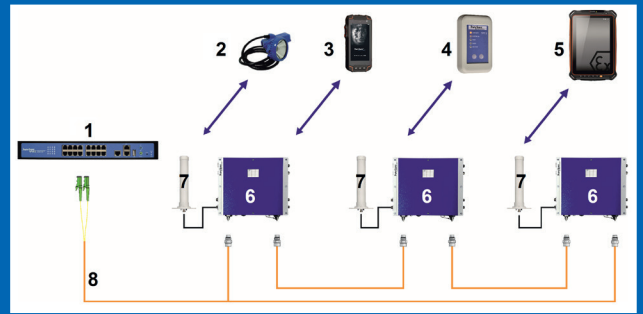


ROUTER MANAGEMENT

A local LED display shows status information about the different interfaces. The WRAP260 Routers can also be managed remotely via web interface or via PC software.

Big router networks can be managed with tools like CAPsMAN® or UNIMUS®.

APPLICATION EXAMPLE



1 Server	5 IS910.M1 Tablet-PC
2 Cap lamp	6 WRAP260
3 IS520.1 Smartphone	7 WiFi antenna
4 TPT3* Personnel TAG	8 Fibre optic cable

FIBRE OPTIC DEVICE CABLES

BOS device cables are preassembled fibre optic cables that are designed for use with network devices.

The cables are fitted with a connector with anti-kink protection and 2 fibres.

The device cables can also be set up as combination cables (device plug with anti-kink protection at one end and a Y-connector at the other end).

The terminal devices are fitted on the outside with appropriate device sockets. In this way you can set up a network connection without having to open any device.

The cable gland is connected to the cable shell and can be used as a cable pull up to a maximum force of 600 N.





HELICAL ANTENNA WHXA 200

The wireless LAN antenna WHXA 200 is designed for maximum communication distance between WRAP260 and client devices.

Gain, directionality and polarization of the WHXA200 antenna are specifically designed for optimal performance in underground environments.



UVLA ANTENNA

The UVLA is an omnidirectional UHF antenna for tagging and tracking purposes. It is robust, IP65 rated and offers a tracking distance of up to 100 m.

The waterproof die-cast enclosure with its galvanized steel baseplate ensures maximum durability in harsh environments.



TECHNICAL DATA



Intrinsic safety
ATEX: 20ATEX0012X
IECEX: IECEXKDB20.0002

MECHANICAL PARAMETERS

Ambient temperature range	-20 °C to 40 °C	
Height x Width x Depth	Double Router: Approx. 310 x 230 x 106 mm	Triple Router: Approx. 310 x 420 x 106 mm
Ingress Protection	Double Router: IP 65/IP67	Triple Router: IP 65
Weight	Double Router: Approx. 7,5 kg	Triple Router: Approx. 16 kg

POWER REQUIREMENTS

Supply voltage	13 V DC to 15 V DC	
Rated power	Double Router: ≤ 13 W	Triple Router: ≤ 19 W

FIBRE OPTIC

Fiber-optic interfaces	Double Router: 2	Triple Router: 4
Output optical power	-9 dBm to -3 dBm	
Input optical power max	0 dBm	
Input optical sensitivity	-24 dBm	
Optical characteristics	1310 nm single mode, 9/125 µm fibre	
Laser class	Class 1, complies with EN 60825-1	
Range	Up to 20 km	
Data rates	Up to 1 Gbit/s	

WIFI

Number of channels	Max. 14 channels (country dependent)	
WiFi modes	Infrastructure/Bridging/WDS	
Communication standards	IEEE 802.11a/b/g/n, support for up to 2x2 MIMO	
Transmit power	Up to +18 dBm	
Receive sensitivity	Down to -94 dBm	
Data rates	Up to 300 Mbit/s per Access Point	
Wireless interfaces	Double Router: 2	Triple Router: 3
Diagnostics	Local diagnostics indication/Traffic monitor/Bandwidth testing	
VLAN	802.1Q	
Roaming	Seamless switched roaming	
Routing - Protocols	OSPF and RIP	
Hybrid Wireless Mesh	802.1S	

TAG-READER

ASK receiver centre frequency	433,92 MHz (±20 ppm)
ASK receiver sensitivity	-90 dBm
ASK receiver baud rate	40 Kbit/s
ASK receiver encoding	NZR PAM – Manchester coding

DESIGNATION	REF	ILLUSTRATION
WRAP260.1*** Double Router	on request	
WRAP260.2*** Triple Router	on request	
Cables Fibre optic device cables	on request	
Antenna Helical Antenna WHXA 200	on request	
Antenna UVLA Antenna	on request	

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