

ELTEC

systems

CyBox AP-W

CyBox AP-R

CyBox LTE

EN 50155 COMPLIANT

WLAN Access Point for mobile and industrial applications



Family concept for network based communication and I/O

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CyBox AP-W

Wireless Access Point

→ Wall-mount version

CyBox AP-R

Wireless Access Point

→ Rack-mount version

EN 50155 COMPLIANT

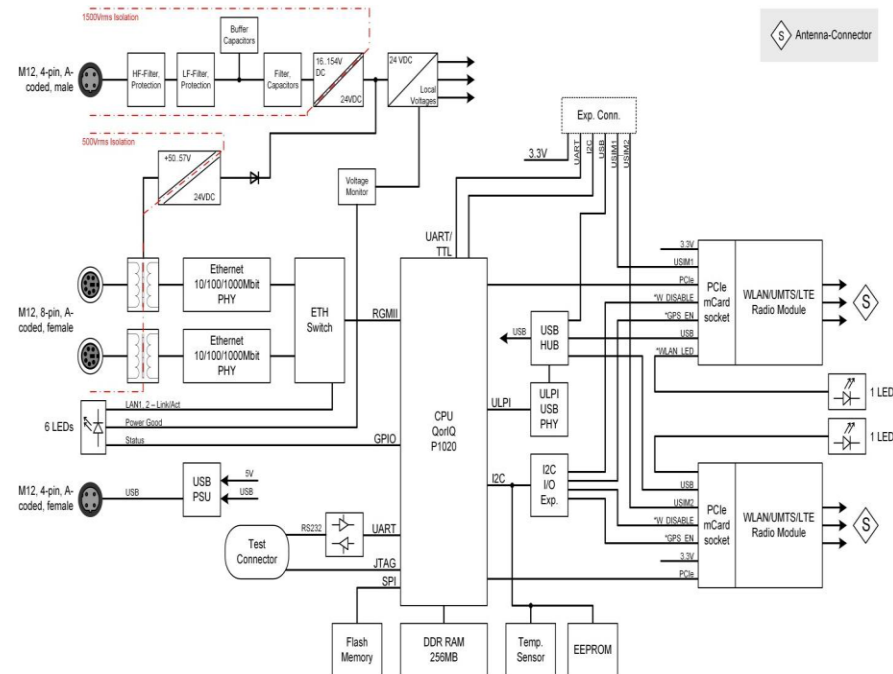
CyBox LTE

Robust Ethernet to
UMTS | LTE Gateway

→ LTE-version available June 2014

Features

- Industrial and mobile IEEE 802.11a/b/g/n dual radio simultaneous 2.4 GHz / 5 GHz
- QorIQ P1011 CPU
- PoE Class 4 or 24 - 110 VDC
- Galvanic isolation +ve and -ve from casing, polarity protection
- Integrated 2-port Gigabit Ethernet switch
- Operating temperature -40 to +70°C
- Integrated firmware for management and configuration (OpenWRT)
- Failsafe operation due to dual flash firmware
- Digital Inputs / Outputs
- EN 50155 compliant version



Construction details

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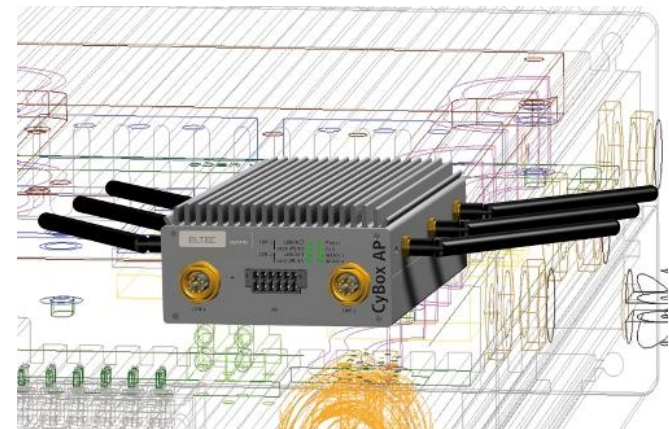
- Robust IP30 aluminum housing
 - › Other IP classes on request (e.g. IP67)
- Fanless operation from -40°C to +70°C, EN 50155 compliant (Class T2)
- Shock and vibration resistant according to well-established DIN, EN and IEC industry standards

→ Dimensions: 105 mm x 54 mm x 164 mm

→ Weight: 1100 g (without antennas)

→ Optional

- › Wall-mounting
- › DIN-rail mounting



In compliance with applicable DIN, EN and IEC industry standards

→ Sinusoidal Vibration

- › According to EN 50155, § 4.1.3
- › Criterion: A and mechanical integrity

→ Random Vibration

- › According to EN 50155, EN 61373, § 8.1, Table 1, Category 1, Class B; Frequency Range 5-100 Hz, 1 m/s² in three axis
- › According to EN 50155, EN 61373, § 9.1, Table 2, Category 1, Class B; Frequency Range 5-100 Hz, 7.9 m/s² RMS vertical axis, 5.5 m/s² RMS longitudinal and transversal axis
- › Criterion: A and mechanical integrity

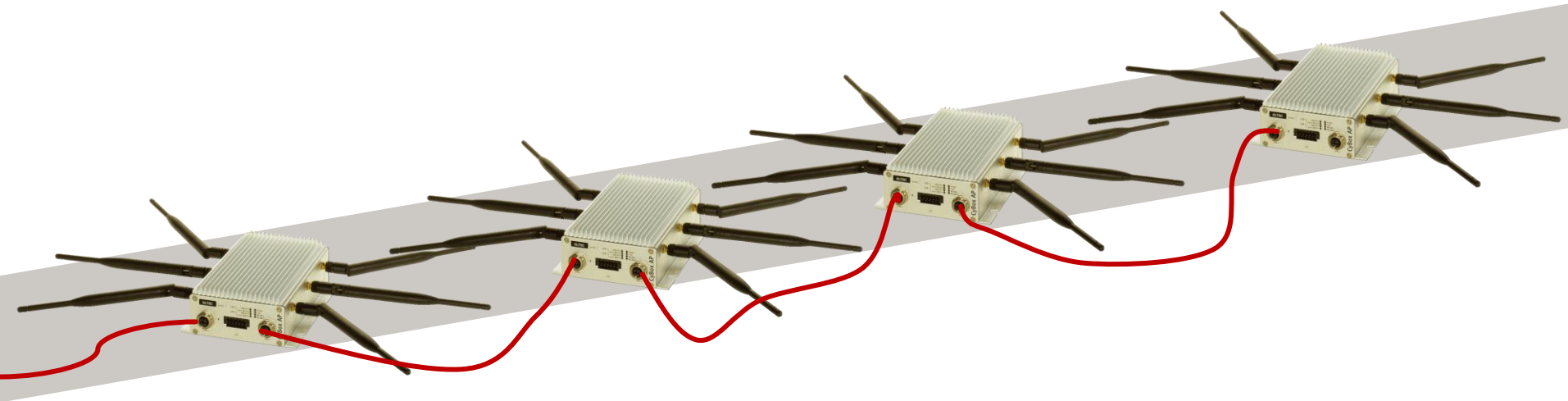
 EN 50155 COMPLIANT

→ Shocks

- › According to EN 50155, EN 61373, § 10.5, Table 3, Category 1, Class B; 50 m/s² for 30 ms (longitudinal axis), 30 m/s² for 30 ms (transversal and vertical axis)
- › Criterion: No operating failure after test and mechanical integrity

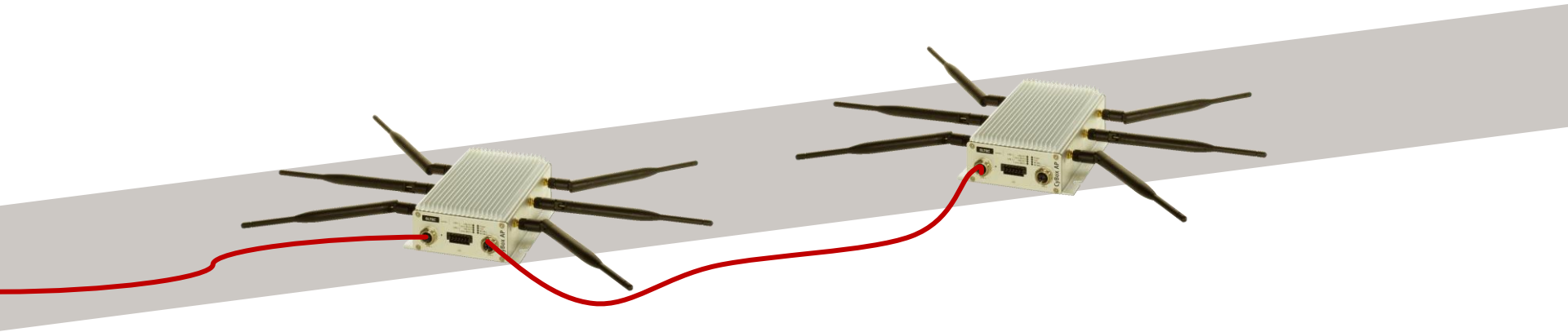
Two Gigabit Ethernet ports (via M12 connectors) provide for:

- Daisy chaining with additional access points
 - › Dual daisy-chained access points in one car guarantee that WiFi is still available even when one is powered down



Two Gigabit Ethernet ports (via M12 connectors) provide for:

- PoE is designed for two chained devices
 - › PoE is designed for two chained devices
 - › Daisy-chain still operable even if access point is switched off – independent bridge to access point down the chain

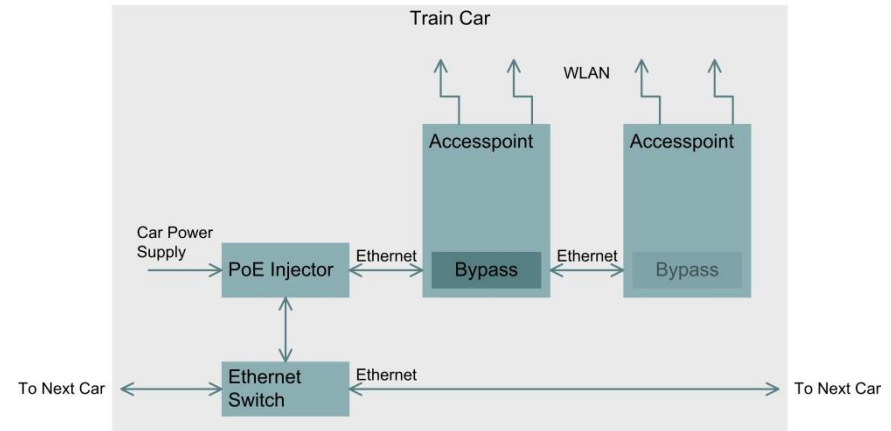
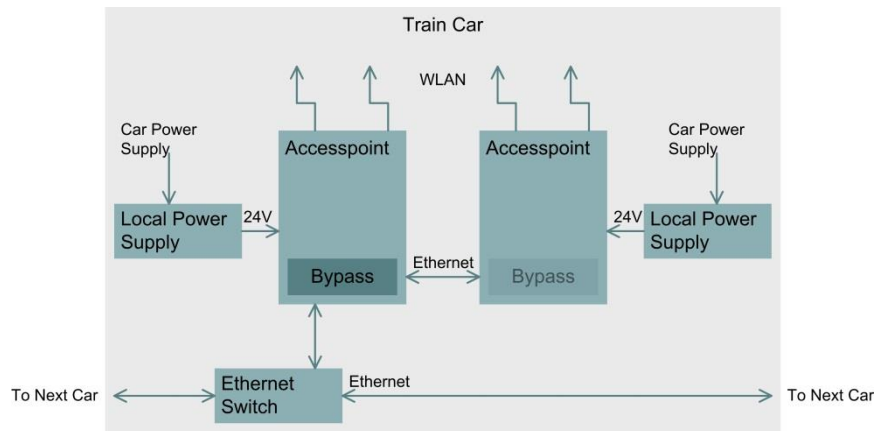


Flexible power supply

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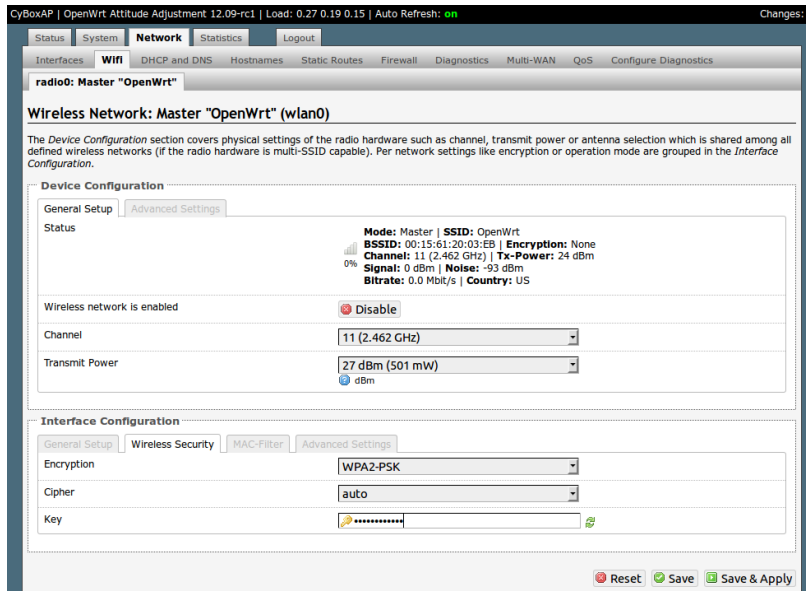
- Power supply via
 - › Local wide range 24 - 110 VDC supply (EN 50155 compliant, optional Class S2)
 - › PoE input (in compliance with IEEE802.3af, Class 3)
- Second CyBox AP can be supplied by one PoE source
 - › Expanded radio transmission of two access points with only one Ethernet cable



- PCI Express Mini card ensures flexibility and upgrade path
- RF 3T3R for up to 450 Mbps raw data rate
- Simultaneous Dual Band (2,4 and 5 GHz – dual radio) for maximum flexibility
- Enhanced Wireless Security
 - › 64/128-bits WEP, WPA, WPA2-PSK



Intuitive operation



- Firmware based on Linux with OpenWRT
 - › flexible
 - › open
- Easy-to-handle web-based user interface
 - › LAN / WiFi interfaces
 - › Network settings
 - › Encryption WEP, WPA, WPA2-PSK
 - › VLAN, ICCP, QoS
 - › Stateful Firewall setup
- Loading / saving configurations via LAN
 - › Remote configuration via browser
 - › Remote configuration via SSH / SCP
 - › Configuration setups for larger target environments build with shell script

Models, options, and accessories

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**MADE IN
GERMANY**

Coated printed
circuit board

QMA/SMA antenna
connector

Rail norm EN 50155
Class S2

DIN-rail mounting

Expanded operating
temperature

E1 certification

Second WLAN
module

WLAN antennas

Housing options

Dual Core CPU