

CAR-A-WAN.rail Trio LTE-A v6 Mobiler WLAN-Router – CAWv6S7455TR



Mobile WLAN router with connection to the Internet via a double-designed mobile radio connection that can be actively operated in parallel, with two physical WLAN interfaces, GPS and CAN. This completely newly developed router offers a total of 5 mPCIe slots (to one slot for mSATA), dedicated for up to two modems via USB 3.0, two WLAN cards with full PCI bus and a combination slot for modem or WLAN card. All components are designed for SPV applications, the SIM card tray is modular and can, for example, be exchanged for an embedded SIM. The operating system CAW-OS has received a facelift and supports CAPWAP and ciboTIX.

Commercial data

Packaging unit	1 STK
Minimum order quantity	1 STK
GTIN	4260031731885 4260031732004 (Option: 10 GByte memory)
Type designation	CAWv6
Format Serial number	111xxxx
Weight per piece (excluding packaging)	2573 gr
Weight per piece (including packaging and accessories, without antennas)	3118 gr
Customs tariff number	8517.7019
Country of origin	Germany
Variant(s)	CAR-A-WAN.rail LTE-A v6 / CAWv6S7455R / GTIN: 4260031731861 CAR-A-WAN.rail Plus LTE-A v6 / CAWv6S7455PR / 4260031731878 CAR-A-WAN.rail AP v6 / CAWvRAP / 4260031732035

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Technical data

General data

Power consumption at 24V	max. 1150 mA
Input voltage	12-38 V DC, typ. 12/24 VDC
No-load current after device switch-off	< 0.9 µA
Housing dimensions	260 x 160 x 90 mm (260mm x 178,3mm x 90 mm with antenna connections)
Housing material	Aluminium
Cable length power supply	flexible, Plug (suitable for field mounting) included in scope of delivery
Ambient temperature (operation)	-30 °C ... 85 °C
Ambient temperature (storage)	-40 °C ... 105 °C

Mobile communications

Mobile radio bands	LTE: B1 (2100), B2 (1900), B3 (1800), B4 (AWS), B7 (2600), B12 (700ac), B13 (700c), B20 (800DD), B5 (850), B25 (1900), B26 (US 850 Ext), B29 (US 700de Lower), B41 (TDD 2500), B30 (2300 WCS) LTE regions: Europe, North America, Asia, South America, Africa UMTS: B1 (2100), B2 (1900), B8 (900), B4 (AWS), B3 (1800), B5 (850)
Mobile technologies	3G (UMTS). 3,5G (HSDPA, HSUPA, HSPA+); 4G
Max. download via modem	300 Mbit/s
Max. upload via modem	50 Mbit/s
Number of modems	3
Type modem	Sierra Wireless MC7455 LTE Cat 6

WLAN

Compatibility	IEEE 802.11ac compliant and backward compatible to IEEE 802.11b/g/n
Max. WLAN Speed	11/54/130/300/876 Mbit/s
MIMO Channels	2x2

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Maximum number of WLAN clients	252 nominal (Class C network), estimated 100 to 120 passengers
chipset	Qualcomm Atheros QCA9892
Technologies	Supports Spatial Multiplexing, Cyclic-Delay Diversity (CDD), Low-Density Parity Check (LDPC) Codes, Maximal Ratio Combining (MRC), Space Time Block Code (STBC), IEEE 802.11d, e, h, i, k, r, v time stamp, and w standards, Dynamic Frequency Selection (DFS)
Type WLAN card	Compex WLE600VX 7AA bzw. WLE600VX 7BA (depending on the temperature profile of the customer scenario)

GPS

Compatibility	GPS/QZSS L1 C/A, GLONASS L10F, BeiDou B1I, Galileo E1B/C SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN
Dead Reckoning	ADR (with 3D sensor, independent of wheel sensors and CAN, optimized for ciboTIX e-ticketing)
Protocols	NMEA, UBX binary, RTCM
Type GPS sensor	ublox NEO-M8L 3D Automotive Dead Reckoning (ADR) Module NEO-M8L.0

ciboTIX

Compatibility	Android > 4.1 / iOS > 9.x
EU data protection	Data protection audit vom 24.11.2016
Samplingrate GPx	2 Sekunden, TLS

External interfaces

Power supply	Flush-type connectors - SACC-M12MS-4PL SH – 1424666, PHOENIXCONTACT
SIM-Cards	up to 3x2 Mini-SIM-Card
SIM dimensions	Length = 25,00 mm, Width = 15,00mm, Thickness = 0,76mm
Ethernet	2x Bus system flush-type connector - SACCBP-M12FS-8CON-M16/0,8-940 – 1562974, PHOENIXCONTACT

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OPTION 1 (via SIM-Daughterboard)	f.e. Embedded-SIM, digital IO
OPTION 2 (via mPCIe)	Alternative: Audio, IBIS, serial interfaces
USB	Option: 1x can be used externally by means of wall bushing VS-EC-MSDB SH SCO – 1440711, PHOENIXCONTACT, USB 3.0 (2.0)
WWAN	4x N female
GPS (software-activatable)	N female
WLAN	4x N female

Internal interfaces

USB	1x Internal use PIN header, USB 3.0 (2.0)
S-ATA (intern)	For additional SATA DOM (Disk-On-Module)

Certification



Registration number, notified body	Transfer from documents are expected.
Safety & Health	Transfer from documents are expected.
Electromagnetic Compatibility	Transfer from documents are expected.
RF Spectrum Efficiency	Transfer from documents are expected.

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FC based of FCC-ID: FCC-ID des Sierra Wireless MC7455 LTE und Compex WLE600VX 7BA

Eurofins Testreport	Transfer from documents are expected.
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Drawings

