

EKI-9502G Series

EN50155 Train-To-Ground Wi-Fi/Cellular Router



Features

- Cellular connectivity with dual SIM cards designed for each cellular module
- Supports up to 4 WWAN connectivity
- Supports wide temperature range: -40 ~ 70°C
- Designed with 24Vdc to 110Vdc isolated power input
- Flexible design with serial interface for Modbus RTU and serial communication protocol
- Supports IPSec, OpenVPN secured tunnel
- Firewall with SPI and IPS function prevents cyber attacks and enhances network efficiency
- Complies with EN50155
- Supports multi-WAN load balance
- Supports up to 1.3Gbps with 3x3 MIMO Wi-Fi

Introduction

The EKI-9502G EN50155 train-to-ground Wi-Fi/cellular router is designed for rolling stock applications. It provides secure Internet connectivity while offering superior application flexibility. EKI-9502G provides automatic wireless failover between WLAN and WAN connectivity and supports up to 4 WWAN(LTE) modules with dual SIM cards installation and up to 2 WIFI modules for 802.11a/b/g/n/ac with 2.4Ghz/5Ghz selective. With load balance, VPN tunneling, and configuration backup, it provides stable and reliable wireless connectivity that is ideal for transportation applications.

Specifications

Wireless LAN Communications

- Compatibility** IEEE 802.11a/b/g/n/ac
- Data Rates**
 - 11b: 11Mbps
 - 11a/g: 54Mbps
 - 11n: 450Mbps
 - 11ac: 1.3Gbps
- Operation Modes** Access Point/Client mode
- Antenna Connector** 6 x RP-SMA Female Connectors (bundle with 2 Cellular module)
- Wireless Security** Open System, Shared Key, Legacy 802.1X

Software

- Management** Web UI
- Wireless** Radio on/off, WMM, Output Power Control, Fragmentation Length, Beacon Interval, RTS/CTS threshold, DTIM Interval

Cellular Interface

- LTE Bit rate** 300 Mbps (DL), 50 Mbps (UL)
- LTE Bands** B20 (800 MHz), B8 (900 MHz), B3 (1800 MHz), B1 (2100 MHz), B7 (2600 MHz)
- 3G Bit rate** 42.0 Mbps (DL), 5.76 Mbps (UL)
- 3G Bands** B1, B2, B3, B4, B5, B8
- No. of SIM Slots** 8
- SIM Card Type** Mini Sim (2FF) 1.8V and 3V
- ANT Connector** 6 x SMA Female Connector

Mechanics

- Enclosure** Metal shell with solid mounting kits
- Mounting** Wall
- Dimensions (W x H x D)** 280 x 160 x 85mm (11" x 6.3" x 3.35") without wall mount ears
- Weight** 1.2 Kg

Interface

- I/O Port** 2 x 10/100/1000 Base-T M12 X-coded Female
- Console Port** RS-232 (Terminal Block Male)
- Serial Port** 2 x RS-232/422/485 Selectable (Terminal Block Male)
- USB Port** 1 x USB 2.0 Front IO (Type A)
- GPS** 1 x U-Blox NEO-8 with SMA Female connector

Power Requirements

- Power Input** 24-110 V_{DC} (±30%)
- Power Connector** M12 A-coded with 4 Poles
- Power Consumption** 21W

Environment

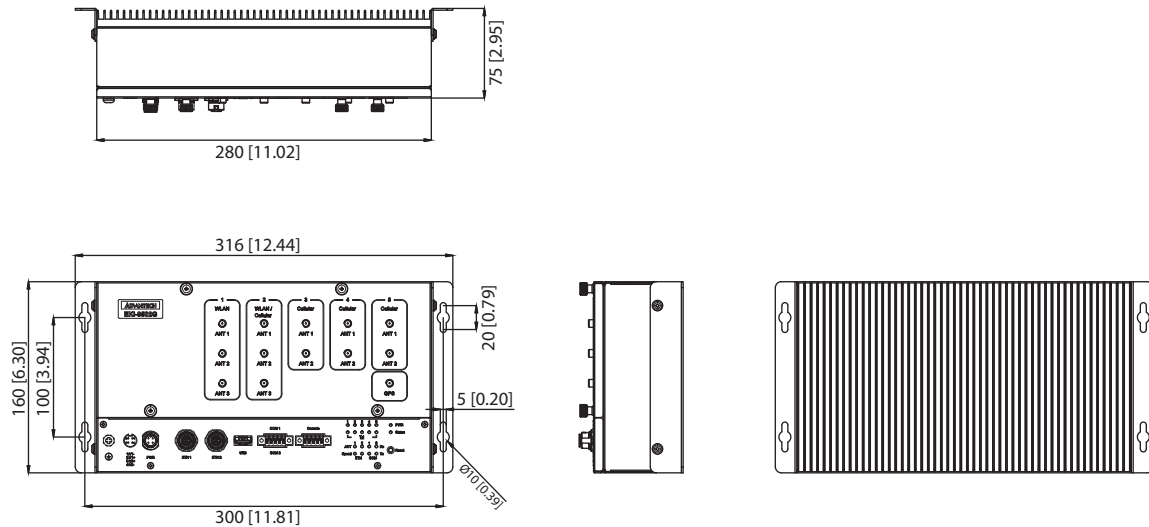
- Operating Temperature** -40 ~ 70°C (-40 ~ 158°F)
- Storage Temperature** -40 ~ 80°C (-40 ~ 176°F)
- Operating Humidity** 10 ~ 95% RH

Regulatory Approvals

- EMC** CE, FCC Part 15 Subpart B (Class B)

Dimensions

Unit: mm [inch]



WLAN Modulation Techniques

- IEEE 802.11a/g OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
- IEEE 802.11b DSSS (DBPSK, DQPSK, CCK)
- IEEE 802.11n OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
- IEEE 802.11ac OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)

WLAN Channel Support

- IEEE 802.11b/g/n HT20 FCC: CH1 ~ CH11; ETSI: CH1 ~ CH13
- IEEE 802.11g/n HT40 FCC: CH3 ~ CH9; ETSI: CH3 ~ CH11
- IEEE 802.11a/n/ac FCC: 5.15~5.25GHz; 5.725~5.85GHz
ETSI: 5.15~5.25GHz; 5.47~5.725GHz

Wireless Transmission Rates

- Transmitted Power**
 - 802.11g 15 dBm
 - 802.11a 15 dBm
 - 802.11n/2.4GHz
 - HT20: 18 dBm@MCS7
 - HT40: 18 dBm@MCS7
 - 802.11n/5GHz HT20: 18 dBm@MCS7
 - HT40: 17 dBm@MCS7
 - 802.11ac VHT80 15 dBm@MCS9

Receiver Sensitivity

- 802.11a Sensitivity** -73 dBm @ 54 Mbps
- 802.11g Sensitivity** -75 dBm @ 54 Mbps
- 802.11n/2.4GHz**
 - HT20 -72 dBm @ MCS7
 - HT40 -68 dBm @ MCS7
- 802.11n/5GHz**
 - HT20 -70 dBm @ MCS7
 - HT40 -68 dBm @ MCS7
- 802.11ac** VHT80 -57 dBm @ MCS9

Ordering Information

- EKI-9502G-CXRW** Tran to Ground Wi-Fi/ Cellular Router

*Package does not include Wi-Fi/Cellular Module

Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.



AutoCont IPC a.s.

Váš dodavatel průmyslových počítačů, komponent a speciálních průmyslových IT systémů.

 Uhlířská 1064/3, 710 00 Ostrava, Česká republika

 obchod@autocont-ipc.cz

 +420 552 301 002

 www.autocont-ipc.cz



PRŮMYSLOVÉ POČÍTAČE

fanless embedded PC, do racku, ...



POČÍTAČE S DISPLEJEM

panelové PC, terminály, do vozidel, ...



AUTOMATIZACE A SBĚR DAT

převodníky, karty, moduly, switche, ...



PERIFERIE A KOMPONENTY

monitory, klávesnice, desky, skříně, ...



NOTEBOOKY A TABLETY

odolné, windows, android, IP65, ...



INFORMAČNÍ KIOSKY

interiérové, venkovní, ...



MEDICÍNSKÁ TECHNIKA

počítače, tablety, LCD, klávesnice, ...



SOFTWAREVÁ ŘEŠENÍ

pro výrobu, zaměstnance, kiosky, ...



PŘEJÍT DO E-SHOPU

eshop.autocont-ipc.cz



DOPRAVA ZDARMA

Doprava zdarma v ČR a SR při
objednávce nad 10 000 Kč bez DPH
nebo nad 400 EUR.



PRODLOUŽENÁ ZÁRUKA

Záruka 2 roky na vyráběné počítače
s možností jejího prodloužení
až na 5 let.



ODMĚNA ZA VĚRNOST

Pravidelní zákazníci u nás nakupují
za nižší ceny. Výše slevy se odvíjí
od realizovaného obrátu.



SERVIS ON-SITE A IN-TIME

K projektovým dodávkám nabízíme
rozšířenou podporu a servis s garancí
výměny zařízení do 48 hodin.