

EKI-1321

EKI-1322

1-port RS-232/422/485 to GPRS
IP Gateway

2-port RS-232/422/485 to GPRS
IP Gateway



Features

- Universal quad-band GSM/GPRS 850/900/1800/1900 MHz
- Dual SIM for telecom redundancy
- Support SDHC SD Card for Data Buffering
- Connect Ethernet and Serial Devices over VPN
- Various operation modes: COM port redirector, RVCOM, TCP, UDP, SMS tunnel, and pair connection
- Any baud rate setting for easy configuration
- Built-in 15 KV ESD protection for all serial signals
- 1.5 KV isolation protection (EKI-1321)
- 2 digital inputs (EKI-1321)
- Multiple configuration methods: Windows utility, Telnet, and Web console

Introduction

EKI-1321 and EKI-1322 cellular gateways can transparently bring RS-232/422/485 or Ethernet devices to a cellular network. They allow nearly any device with serial or Ethernet ports to connect and share a cellular network with easy and simple configuration. EKI-1321 and EKI-1322 GPRS IP Gateway's are compact, and can be DIN-rail or wall mounted and with both front panel and side panel LED displays for easy identification. They come with dual DC power input from 12 to 48 V_{DC} and have 2 KV EFT/Surge protection to prevent damage from various type of power resources. The serial ports are also protected by 15 KV ESD line protection to keep your system safe from unexpected electrical discharges. Both models support dual SIM slots to support GPRS signal redundancy to switch to an available channel automatically while the existing one is disconnected, and SD card slot for data buffering to prevent loss of serial data while the communication is interrupted.

Specifications

LAN Interface

- Ethernet
 - Connector
 - Protection
- 10/100 Mbps, auto MDI/MDIX
RJ45
1.5 KV built-in magnetic isolation protection

Cellular Interface

- Standards
 - Band Option
 - GPRS Multi-Slot
 - GPRS Terminal Device
 - GPRS Coding Schemes
 - Tx Power
 - No. of SIM
 - SIM Control
- GSM/GPRS
Quad-band 850/900 and 1800/1900 MHz
Class 10
Class B
CS1 ~ CS4
1 W for GSM 1800/1900, 2 W for EGSM 850/900
2
3 V

Serial Communications

- Port Type
 - No. of Ports
 - Port Connector
 - Data Bits
 - Stop Bits
 - Parity
 - Baud Rates
 - Serial Signals
 - Protection
- RS-232/422/485, software selectable
EKI-1321: 1, 2 KV isolation protection
EKI-1322: 2
DB9 male
5, 6, 7, 8
1, 1.5, 2
None, Odd, Even, Space, Mark
75 bps to 921.6 kbps, any baud rate setting
RS-232: TxD, RxD, CTS, RTS, DTR, DSR, DCD, RI, GND
RS-422: TxD+, TxD-, RxD+, RxD-, GND
RS-485: Data+, Data-, GND
15 KV ESD for all signals

Relay Output

- Channel
 - Contact Rating
 - Relay off Time(Typ.)
 - Relay on Time(Typ.)
- 1
0.5 A @ 120 V_{AC}
0.25 A @ 240 V_{AC}; 2 A @ 30 V_{DC}
4 ms
3 ms

Digital Input (EKI-1321)

- Channel
 - Input Level
- 2
Logic level 0: 1 V Maximum
Logic level 1: 3 ~ 30 V

General

- LED Indicators
 - Reboot Trigger
 - Software
 - Driver Support
 - Utility Software
 - Operating Modes
 - Configuration
 - Protocols
 - Router/Firewall
- System: Power, Status
GPRS: Quality, ready
Serial: Tx, Rx
Ethernet: Speed, Link/Active
Built-in WDT (watchdog timer)
- 32-bit/64-bit Windows XP/Vista/7/8, Windows Server 2003/2008/2008 R2/2012, Windows CE 5.0, and Linux
Advantech EKI Device Configuration Utility
Virtual COM, Reverse Virtual COM, TCP/UDP server mode, TCP/UDP client mode, Pair connection mode (Serial Tunnel), RFC2217, SMS Tunnel, IP Gateway w/ VPN
Windows utility, Telnet console, Web Browser
ARP, ICMP, IPv4, IPv6, TCP, UDP, BOOTP, DHCP Client, Auto IP, Telnet, DNS, SNMP, HTTP, HTTPS, SMTP, SNTP, SSL
NAT, port forwarding

Mechanics

- Dimensions (W x H x D)
 - Enclosure
 - Mounting
 - Weight
- 27 x 120 x 85 mm (1.06" x 4.72" x 3.35")
Metal with solid mounting hardware
DIN-rail, Wall
0.49 Kg

Power Requirements

- Power Input
 - Power Connector
 - Power Consumption
 - Power EFT/Surge Prot.
- 12 ~ 48 V_{DC}, redundant dual inputs
Terminal block
EKI-1321: 8W, EKI-1322: 8.5W
2 KV

Environment

- Operating Temperature
 - Storage Temperature
 - Operating Humidity
- 30 ~ 65°C (-22 ~ 149°F)
-40 ~ 75°C (-40 ~ 167°F)
5 ~ 95% RH

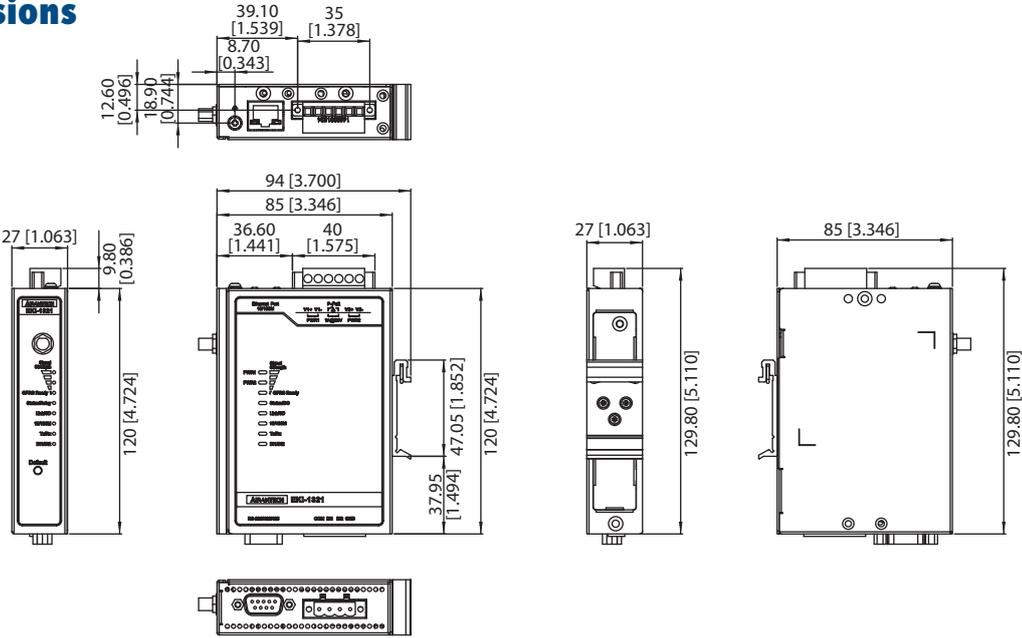
Regulatory Approvals

- EMC
 - RF
- CE: EN55022/EN55024, Class A
FCC: FCC part 15 subpart B, Class A
FCC Part22H/Part24E, EN301 489-1, EN301 489-7, EN301 511

Dimensions

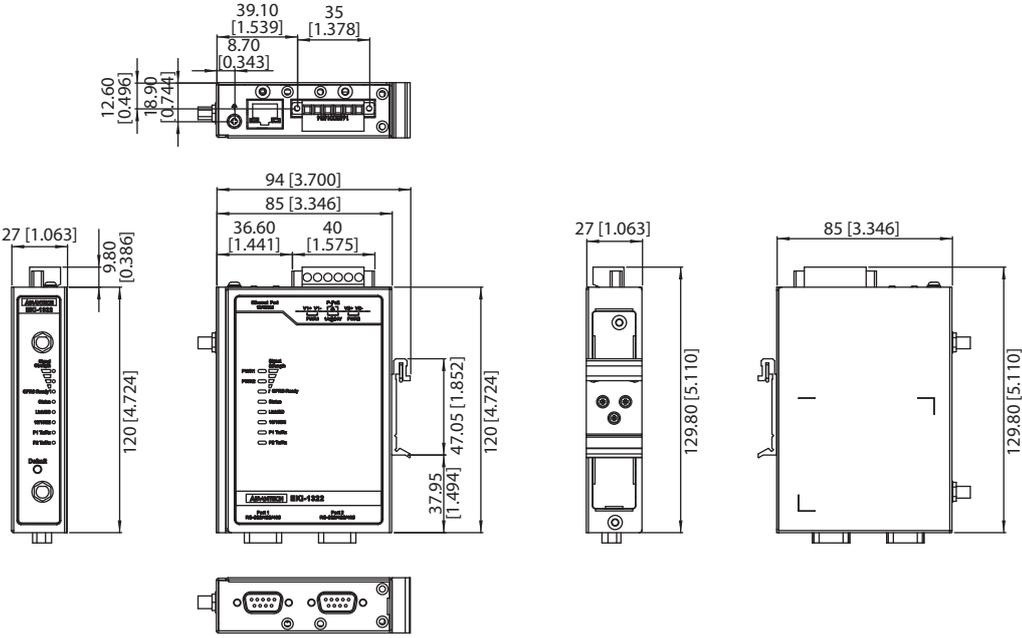
Unit: mm [inch]

EKI-1321



Panel Cut-out Dimensions: 94 x 120 x 27 mm (3.700" x 4.724" x 1.063")

EKI-1322



Panel Cut-out Dimensions: 94 x 120 x 27 mm (3.700" x 4.724" x 1.063")

Ordering Information

- EKI-1321 1-port GPRS IP Gateway
- EKI-1322 2-port GPRS IP Gateway
- OPT1-DB9 D-Sub 9 to Terminal Converter