EKI-1321
EKI-1322

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

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

NEW

| EKI-1321 | EKI-1322 |

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

Cellular Interface

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

Serial Communications

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

Relay Output

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

Digital Input (EKI-1321)

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

General

- **LED Indicators**   System: Power, Status / GPRS: Quality, ready / Serial: Tx, Rx / Ethernet: Speed, Link/Active
- **Reboot Trigger**   Built-in WDT (watchdog timer)

Software

- **Driver Support**   32-bit/64-bit Windows XP/Vista/7/8, Windows Server 2003/2008/2008 R2/2012, Windows CE 5.0, and Linux
- **Utility Software**   Advantech EKI Device Configuration Utility
- **Operating Modes**   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
- **Configuration**   Windows utility, Telnet console, Web Browser
- **Protocols**   ARP, ICMP, IPv4, IPv6, TCP, UDP, BOOTP, DHCP Client, Auto IP, Telnet, DNS, SNMP, HTTP, HTTPS, SMTP, SNTP, SSL
- **Router/Firewall**   NAT, port forwarding

Mechanics

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

Power Requirements

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

Environment

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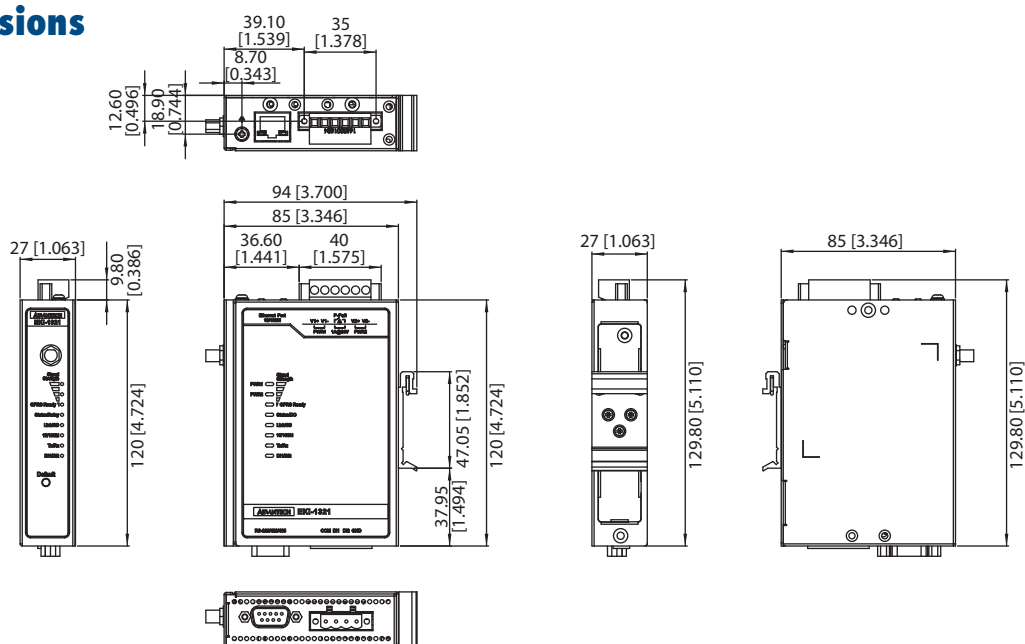- **Operating Humidity**   5 ~ 95% RH

Regulatory Approvals

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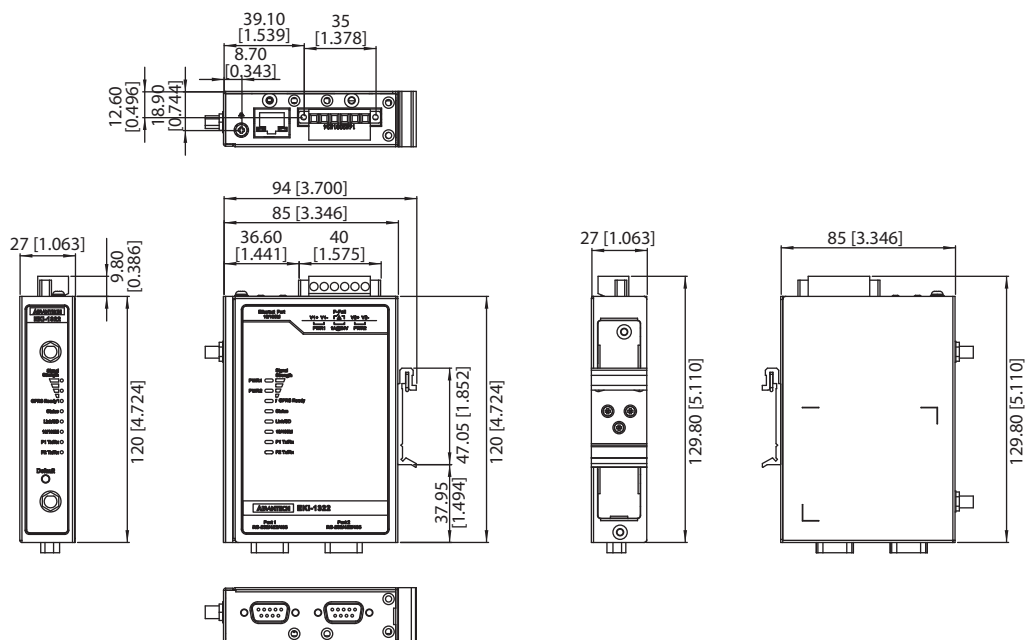
Dimensions

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