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
- SD slot with extra SD card for data buffering
- Connect Ethernet and serial devices
- Various Operation modes: COM port redirector, RVCOM, TCP, UDP, SMS tunnel, and pair connection etc
- Any baud rate setting for easy configuration
- 2 digital inputs (EKI-1321)
- Multiple configuration methods: Windows utility, Telnet, and Web console
- Supports Windows 2000/XP/Vista/7, Windows CE and Linux drivers



Introduction

EKI-1321 and EKI-1322 are cellular gateways that 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 2KV EFT/Surge protection to prevent damage from various type of power resources. The serial ports are also protected by 15KV 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 10/100/1000 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 to CS4

Tx Power 1W for GSM 1800/1900, 2W for EGSM 850/900

Number of SIM 2SIM Control 3V

Serial Communications

Port Type
RS-232/422/485, software selectable

• No. of Ports EKI-1321: 1, isolation

EKI-1322: 2 DB9 male

Port Connector
Data Bits
Stop Bits
DB9 male
5, 6, 7, 8
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 0.5A@120V_{AC}

0.25A@240V_{AC} 2A@30V_{DC} 0.24A@110V_{AC}

Relay off Time(Typ.)Relay on Time(Typ.)3ms

Digital Input(EKI-1321)

Channel

■ Input Level Logic level 0: 1V Max

Logic level 1: 3~30V

General

■ **LED Indicators** System: Power, System Status

GPRS: Quality, GPRS ready

Serial: Tx, Rx

Reboot Trigger Built-in WDT (watchdog timer)

Software

Driver Support
Windows 2000/XP/2003/Vista/7/Server-2008,

Windows XP/2003/Server-2008/7 x64 Edition, Linux

TTY Driver

Utility Software
Operating Modes
Advantech Serial Device Server Configuration Utility
Virtual COM, Reverse Virtual COM, TCP/UDP server

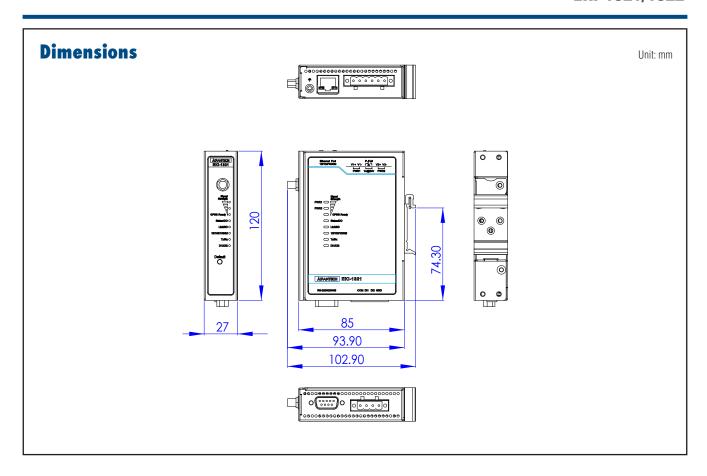
mode, TCP/UDP client mode, Pair connection mode(Serial Tunnel), RFC2217, SMS Tunnel, IP

Gateway w/ VPN

• Network Protocols ICMP, TCP/IP, UDP, DHCP Client, Telnet, DNS, SNMP,

HTTP, HTTPS, SMTP, SNTP, ARP, SSL

• Router/Firewall NAT, port forwarding



Mechanics

Dimensions (W x H x D) 27 x 120 x 85 mm

Enclosure Metal with solid mounting hardware

Mounting DIN-rail, Panel $490 \pm 10g$ Weight

Power Requirements

 Power Input $12 \sim 48 V_{DC}$, redundant dual inputs

 Power Connector Terminal block

 Power Consumption EKI-1321: 6 W, EKI-1322: 6.5 W

• Power EFT/Surge Prot. 2KV

Environment

• Operating Temperature $-30 \sim 65^{\circ}\text{C} (-22 \sim 149^{\circ}\text{F})$ • Storage Temperature $-40 \sim 75^{\circ}\text{C} (-40 \sim 167^{\circ}\text{F})$

 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,

Ordering Information

■ EKI-1321 1-port GPRS IP Gateway 2-port GPRS IP Gateway **EKI-1322** OPT1-DB9 DB9 to Terminal Connector