

PK70 EX 232

4-Port Serial to Ethernet Server

RS-232 Version



DATASHEET

Key Points

- Serial to Ethernet server
- RS-232 serial device support
- Works out of the box - no programming is required
- Metal enclosure
- Rebrand with your custom product label
- Customize with development kit

Features

- 10/100Mbps Ethernet
- TCP/UDP/Telnet modes
- DHCP/Static IP modes
- SSL/TLS 1.3
- Web based configuration
- 32-bit performance
- Four serial ports
- Custom serial packetization options
- Power via two position terminal block or barrel connector

Optional

The following options are available with the optional development kit:

- Customize any aspect of operation including web pages, data filtering, or custom network applications
- Additional baud rates
- Micro SD/MMC Card interface with included flash file system



Factory Application Specifications

Serial Port Baud Rate

Factory application supports up to 115,200 bps. Custom rates available with development kit.

Serial Protocols Supported

RS-232

Serial Configurations

The UARTs are configured in the following way:

- One RS-232 serial console port
- Four RS-232 serial data ports

Hardware Specifications

Processor & Memory

32-bit Freescale ColdFire 5270 running at 147MHz with 4Mbytes of on-chip flash, 8Mbytes SDRAM.

Storage

SD/MMC Flash Card Interface (with SDHC support)

Network Interface

10/100 BaseT with RJ-45 connector

Data I/O Interface

- Up to 5 UARTs

LEDs

Two Link/Status Ethernet LEDs

Two user programmable bi-color LEDs

Physical Characteristics

Dimensions (inches): 4.4" x 3.9" x 1.2"

Power

DC Input Voltage: 7V-24V

Environmental Operating Temperature

0° to 70° C

RoHS Compliance

The Restriction of Hazardous Substances guidelines ensure that electronics are manufactured with fewer environment harming materials.

Agency Approvals

UL, C/UL, CE, FCC



Connector Interface Description and Pinouts

The back panel has a Serial I/O Connector (DB37) which can be connected to the 1-to-4 Serial Cable Adapter (DB37 to 4 x DB9). The adapter enables you to connect to four serial devices with DB9 connectors. Table 4 provides descriptions of the function of each pin on the Serial I/O Connector and the 1-to-4 Serial Cable Adapter DB9 serial ports 1-4.

Table 1: Connector Description

Connector	Description	Default Setting
Serial I/O Connector (DB37)	Back panel DB37 port	Serial ports 1-4
1-to-4 Serial Cable Adapter (DB37 to 4 x DB9)	Serial port Connector (4 x DB9)	Serial ports 1, 2, 3, and 4
RS-232 / UART 0	DB9 connector	Console port
Power Input 1	Barrel connector	Default power source
Power Input 2	Two position terminal block	

Table 2: Power Connector (Power Input 1 Barrel Connector) Pinout and Signal Description¹

Pin	Signal	Description
Outer Shell	Negative	Ground
Center Pin	Positive	Raw DC Power Input

Note:

- Optional power input

Table 3: Power Connector (Power Input 2 Terminal Block Connector) Pinout and Signal Description¹

Pin	Signal	Description
1	Negative	Ground
2	Positive	Raw DC Power Input

Note:

- Optional power input

Table 4: Serial I/O Connector (DB37) and the 1-to-4 Serial Cable Adapter (DB37 to 4 x DB9) Pinout and Signal Descriptions ⁽¹⁾-

DB37	DB9-1	DB9-2	DB9-3	DB9-4	Description	Max Voltage
1				1	Raw Port 4 Carrier Detect	RS-232
2				2	Raw Port 4 Receive	RS-232
3				3	Raw Port 4 Transmit	RS-232
4				4	Raw Port 4 Data Terminal Ready	RS-232
5				5	GND	-
6			9		Raw Port 3 Ring Indicator	RS-232
7			8		Raw Port 3 Clear to Send	RS-232
8			7		Raw Port 3 Ready to Send	RS-232
9			6		Raw Port 3 Data Set Ready	RS-232
10		1			Raw Port 2 Carrier Detect	RS-232
11		2			Raw Port 2 Receive	RS-232
12		3			Raw Port 2 Transmit	RS-232
13		4			Raw Port 2 Data Terminal Ready	RS-232
14		5			GND	-
15	9				Raw Port 1 Ring Indicator	RS-232
16	8				Raw Port 1 Clear to Send	RS-232
17	7				Raw Port 1 Ready to Send	RS-232
18	6				Raw Port 1 Data Set Ready	RS-232
19	NC	NC	NC	NC	No Connection	RS-232
20				6	Raw Port 4 Data Set Ready	RS-232
21				7	Raw Port 4 Ready to Send	RS-232
22				8	Raw Port 4 Clear to Send	RS-232
23				9	Raw Port 4 Ring Indicator	RS-232
24			5		GND	-
25			4		Raw Port 3 Data Terminal Ready	RS-232
26			3		Raw Port 3 Transmit	RS-232
27			2		Raw Port 3 Receive	RS-232
28			1		Raw Port 3 Carrier Detect	RS-232
29		6			Raw Port 2 Data Set Ready	RS-232
30		7			Raw Port 2 Ready to Send	RS-232
31		8			Raw Port 2 Clear to Send	RS-232
31		9			Raw Port 2 Ring Indicator	RS-232
33	5				GND	-
34	4				Raw Port 1 Data Terminal Ready	RS-232
35	3				Raw Port 1 Transmit	RS-232
36	2				Raw Port 1 Receive	RS-232
37	1				Raw Port 1 Carrier Detect	RS-232

Note:

1. Note: Raw ports are named so because they do not correspond to the UART numbers of the MCF5270; a separate UART component on the UART blade boards are used for additional UART ports.

Part Numbers

PK70 EX 232 4-Port Serial to Ethernet Server (RS-232 Version)

Part Number: PK70EX-232CR

DIN Rail Mounting Kit (100 Version, double sided)

Part Number: DIN-100

DIN Rail Mounting Kit (200 Version, single sided)

Part Number: DIN-200

PK70 EX 232 Development Kit

Part Number: NNDK-PK70EX232-KIT

Kit includes all the hardware and software you need to customize the included platform hardware. See NetBurner Store product page for package contents.

Ordering Information

E-mail: sales@netburner.com

Online Store: www.NetBurner.com

Telephone: 1-800-695-6828