

Protocol Converter

Protocol Converter (KHP-PC1)

Kaihatsu Techno Centre Pvt. Ltd. is engaged in designing and development of Supervisory Control and Data Acquisition (SCADA) software.

While deploying the software, it was noticed that there is a need for various small hardware interface units. They are mainly needed because of the fact that each instrument has its own protocol. There is a need of protocol converter so that all the hardware objects will speak a common language. As these units need to be custom built, Kaihatsu Techno Centre has decided to promote these custom make hardware products to match the protocol issues.

One such product in this basket is Protocol Converter. It converts the various instrument read out in Industrial Standard Protocol. Following are the features offered:

- **Any Input:** The converter supports RS 232 or RS 485 input. The input levels are industrial standard.
- **Any Output:** The converter can send the data in any hardware output format like RS 232 or RS 485. The output levels are industrial standard. 220 Ohms impedance with two wires output in case of RS 485.
- **Microcontroller Based Design:** The design is totally Industrial Standard Microcontroller based. The various input parameters are programmable to various Output registers.
- **Programmable Register Mapping:** The registers are mapped for various input parameters. These mapping can be customised to suit the output requirement.
- **Dual UART Design:** As the input and the outputs of this controller are serial, the design is supported by dual Universal Asynchronous Receiver Transmitter Design. This reduces load on microcontroller.
- **Serial Programming on Field:** The register Mapping can be programmed on field using serial interface.
- **Remote Programming on Field:** The device can be remotely programmed on the field using the modem and a telephone line.
- **Data Security:** Active software protocol for data security, packet losses.
- **Robust Power Supply:** The design has built in power supply, which can take the voltage swing from 9V DC to 32V DC. Special request for 48V DC power rail is also available.
- **ASCII or HEX output:** Specially, the MODBUS can be in ASCII or HEX format. The converter output is available in both the formats.
- **Easy Mounting:** Industrial Standard mechanical mounting on DIN Rail

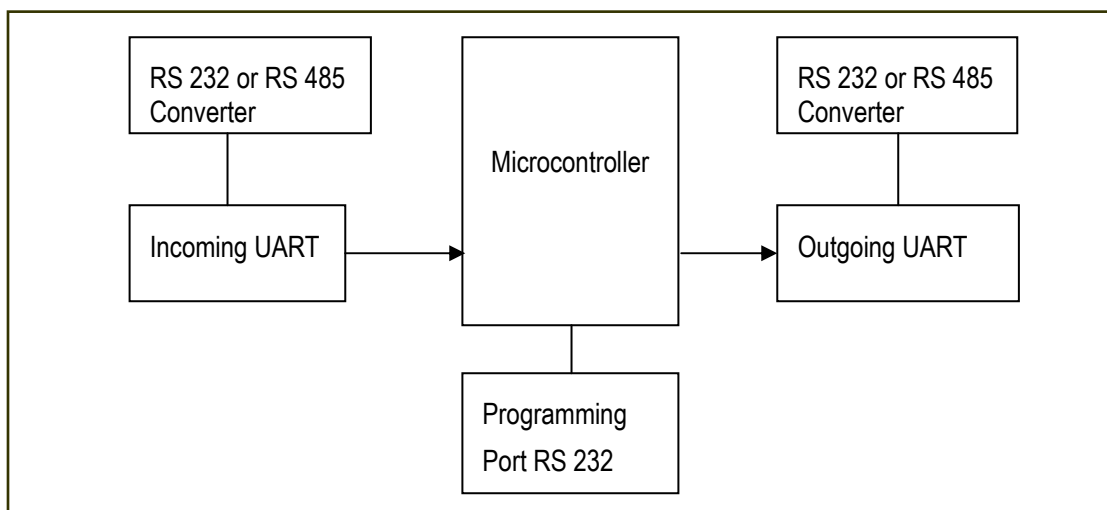


Figure: Block Diagram of Protocol Converter

Technical Specifications:

- **Supply Voltage** : 9 V DC to 32 V DC. (48V on request)
90 V to 270 V AC/DC SMPS is provided
- **Supply Current** : 350 mA
- **Max. Baud Rate** : 9,600 bps for all ports, One Stop, One Start, 8 Bit Data and
No parity
- **Output Impedance** : 75 Ω / 220 Ω / 600 Ω (selectable)
Others available on request
Output available on both 2 wire or 4 Wire format
- **MOD BUS Format** : ASCII or RTU
- **Register Mapping** : Programmable
- **Power Off Memory** : 20 years
- **Mounting** : Four Screws or DIN Rail
- **Mechanical Dimensions** : 142 mm X 56 mm X 32 mm
- **Indicators** : Power On LED and LEDs on both Rx, Tx lines on both
channels
- **Environment** : Temperature: -10°C to +65°C.
Humidity: 0% to 95%
IP 61 casing can be provided



This Product is Designed and Developed by:

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Specifications are subject to change without notice.