PUSR®
www.pusr.com

Communication Expert
of Industrial IOT

USR-K Port Specification

Embedded Super Port Module



Introduction

USR-K3 is an embedded TCP/IP modules that integrates the TI Cortex-M4 processor which can provide improved performance and high stability. This module has a high frequency of up to 120 Mbps. It is also a highly integrated module that includes TTL, Ethernet port, built-in network transformer, all these can easily achieve data transmission between TTL and Ethernet port and greatly reduce user's development time and improve their development progress.

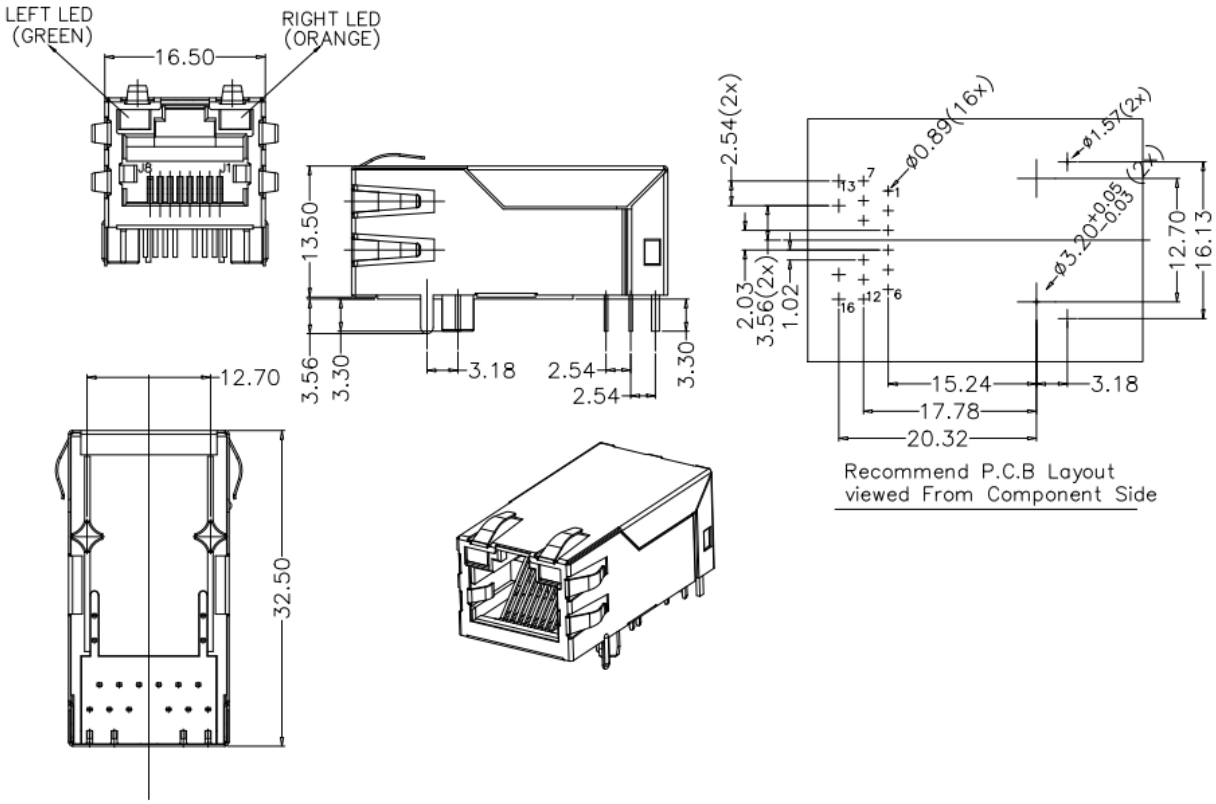
USR-K2 adopts Cortex-M0 processor with a main frequency of up to 48MHz. It has the exact same appearance as K3. Users can switch between the two models without any change in hardware.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Product Features

- 10/100 Mbps Ethernet port, auto MDI/MDX and auto Negotiation.
- Link/Data LEDs can indicate the module's work status.
- 1.5 KV electromagnetic isolation and built-in network transformer for ethernet port.
- Supports hardware flow control：RTS/CTS.
- USR-VCOM is compatible with both the modules.
- Multiple parties are available, such as None, Odd, Even, Space, Mark.
- Customized webpage can help users to build brand influencers.
- Modbus gateway: protocol conversation between Modbus RTU and Modbus TCP, supports multiple hosts to poll slave.
- WebSocket function can achieve bidirectional data transmission between the serial port and webpage.
- Supports keepalive mechanism which can quickly detect abnormalities such as dead connections and reconnect quickly.

Dimensions(mm)



Specifications

Model	USR-K3	USR-K2
Processor	TI Cortex-M4	Atmel Cortex-M0
Frequency	120MHz	48MHz
Power		
Power Supply	DC: 3.0~3.6V (3.3V is recommended)	DC: 3.0~3.6V (3.3V is recommended)
Consumption	110mA (Aver)@3.3V	136mA (Aver)@3.3V
Ethernet		
Port Number	1 x RJ45	
Rate	10 /100 Mbps, auto MDI/MDX	
Protection	1.5KV electromagnetic isolation	
Serial Port		
Port Number	1 x TTL (3.3V TTL)	
Baud rate	600 bps~1 Mbps	600 bps~460.8 Kbps
Data Bits	5, 6, 7, 8	
Stop Bit(s)	1, 2	
Parity Bit	None, Even, Odd, Space, Mark	
Flow Control	Hardware: RTS/CTS	None
Serial Packet Cache	Send: 2K Bytes Receive: 2K Bytes	Receive: 800 Bytes
Physical Character		
Dimensions(mm)	33.0x19.0x19.2(L*W*H)	
Operating Temperature	-40 ~ 85℃	-25 ~ 75℃
Storage Temperature	-40~120℃	-40 ~ 90℃
Operating Humility	5% ~ 95% (non-condensing)	
Storage Humility	5% ~ 95% (non-condensing)	
Basic Features		
IP protocol	Static/DHCP	
DNS	√	
User-defined DNS	√	
Built-in Webpage	√	
Config Method	Built-in Webpage, Config Software, Open Config Protocol, AT Command	
Work Mode	TCP Server/TCP client/UDP Server/UDP Client	
HTTPD client	√	
Modbus Gateway	Modbus RTU to Modbus TCP Multi-host Modbus polling	
WebSocket	√	x
Max No. of Clients in TCPS	8	16
User-defined Webpage	√	
RF2217 Similar	√	
Registration Packet	√	
Heartbeat Packet	√	
Others		
Certificate	*CE, FCC, *RoHS, *WEEE	*CE, FCC, RoHS, *WEEE
Warranty	1 year	

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Your Trustworthy Smart IOT Partner

PUSR®
www.pusr.com

Official Website: www.pusr.com

Official Shop: shop.usriot.com

Technical Support: h.usriot.com

Inquiry Email: inquiry@usriot.com

Skype & WhatsApp: +86 13405313834

Click to view more: Product Catalog & Facebook & Youtube

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000