

Ethernet Server	USR-TCP232-302	USR-TCP232-304	USR-TCP232-306	USR-TCP232-310
<b>Series</b>	M0 series			
<b>Hardware Parameter</b>				
<b>Power</b>				
VDD	5.0~7.0V		5.0~36.0V	5.0~16.0V
Working Current	150mA (aver) @5V		52mA (aver) @12V 109mA (aver) @5V	110mA (aver) @5V
<b>Ethernet Parameter</b>				
10/100MbpsT(X)port	1	1	1	1
Ethernet port	RJ45			
E-magnetic Isolation	1.5KV			
Auto Switch between cross	✓	✓	✓	✓
<b>Serial Port Parameter</b>				
Serial Port Number	RS232*1	RS485*1	RS232*1/RS485*1/RS422*1 can not work simultaneously	RS232*1/RS485*1 can not work simultaneously
Serial Pin	RS232:TX/RX;	RS485:A/B/G	RS232:TX/RX RS485:A/B RS422:T+/T-/R+/R-	RS232:TX/RX RS485:A/B
RS485 Current-limit Resistor	-	2.2KΩ	2.2KΩ	2.2KΩ
Data Bit	5,6,7,8			
Stop Bit	1,2			
Parity Bit	NONE,ODD,EVEN,MARK,SPACE			
Baud Rate (bps)	600~230.4K			
<b>Other Parameter</b>				
Size (mm)	71.0x60.0x25.0 (L*W*H)		98.0x85.0x24.5 (L*W*H)	90.0x84.0x25.0 (L*W*H)
Working Temp	-25~75℃			
Storage Temp	-40~105℃			
Storage Humidity	5%~95% RH(No Condensation)			
<b>Software Function</b>				
<b>Basic Function</b>				
IP Getting Mode	Static IP or DHCP			
DNS	✓	✓	✓	✓
Set DNS Server address	✓	✓	✓	✓
Built-in Webpage	✓	✓	✓	✓
Parameter Setting	network setting protocol/ WEB setting/AT command			
<b>Transmission Mode</b>				
Transparent Transmission	TCP Server/TCP client/UDP Server/UDP Client			
HTTPD protocol	✓	✓	✓	✓
MODBUS gateway	-	-	-	-
Websocket	-	-	-	-
Self- Custom Webpage	✓	✓	✓	✓
RFC2217	✓	✓	✓	✓
Self-Custom Register Packet	✓	✓	✓	✓
Self-Custom heartbeat packet	✓	✓	✓	✓
Self-Custom MAC	✓	✓	✓	✓
Timeout reboot	✓	✓	✓	✓
Short connection	✓	✓	✓	✓
Connect clear buffer	✓	✓	✓	✓
<b>Transmission performance</b>				

Client number that TCP Server supports	Default 4, at most 16	Default 4, at most 16	Default 4, at most 16	Default 4, at most 16
Network Sending Buffer	6Kbyte	6Kbyte	6Kbyte	6Kbyte
Network Receiving Buffer	4Kbyte	4Kbyte	4Kbyte	4Kbyte
Serial Port Sending Buffer	-	-	-	-
Serial Port Receiving Buffer	2Kbyte	2Kbyte	2Kbyte	2Kbyte
Serial Port Package	4 bytes package time, 400 bytes package length			
Average Transmission delay	<10ms(in local network)			
<b>Relevant Software</b>				
USR-VCOM	✓	✓	✓	✓
USR-Cloud	✓	✓	✓	✓
Setting Software	✓	✓	✓	✓
<b>Reliability</b>				
Power Protection	Reverse connection, ESD and surge protection			
Serial Port Protection	-	RS-485: ESD protection 2KV	RS-485/422: ESD protection 2KV	RS-485: ESD protection 2KV
Certificate	CE, FCC			
<b>Ethernet Server</b>	USR-TCP232-410S	USR-N510	USR-N520	USR-N540
<b>Series</b>	M4 series			
<b>Hardware Parameter</b>				
<b>Power</b>				
VDD	5.0~36.0V	5.0~36.0V	5.0~36.0V	9.0~24.0V
Working Current	86.5mA (aver) @5V	45mA (max) @12V 95mA(max)@5V	45mA (max) @12V 95mA(max)@5V	53mA (aver) 12V
<b>Ethernet Parameter</b>				
10/100MbpsT(X)port	1	1	1	1
Ethernet port	RJ45			
E-magnetic Isolation	1.5KV			
Auto Switch between cross	✓	✓	✓	✓
<b>Serial Port Parameter</b>				
Serial Port Number	RS232*1/RS485*1 can work simultaneously	RS232*1/RS485*1/ RS422*1 Can work simultaneously in different modes	RS232/RS485/ RS422*2 can work simultaneously in different modes	RS232/RS485/ RS422*4 can work simultaneously in different modes
Serial Pin	RS232:TX/RX/RTS/CTS RS485:A/B/G	RS232:TX/RX/RTS/CTS RS485:A/B/G RS422:T+/T-/R+/R-	RS232:TX/RX/RTS/CTS RS485:A/B/G RS422:T+/T-/R+/R-	RS232:TX/RX/RTS/CTS RS485:A/B/G RS422:T+/T-/R+/R-
RS485 Current-limit Resistor	2.2KΩ	2.2KΩ	2.2KΩ	2.2KΩ
Data Bit	5,6,7,8			
Stop Bit	1,2			
Parity Bit	NONE,ODD,EVEN,MARK,SPACE			
Baud Rate ( bps)	600~230.4K			
<b>Other Parameter</b>				
Size (mm)	81.5x84.0x24.0 (L*W*H)	98.0x85.0x24.5 (L*W*H)	150.0x79.0x30.0 (L*W*H)	222.0x122.0x29.0 (L*W*H)
Working Temp	-40~85℃			
Storage Temp	-40~105℃			
Storage Humidity	5%~95% RH(No Condensation)			
<b>Software Function</b>				
<b>Basic Function</b>				
IP Getting Mode	Static IP or DHCP			
DNS	✓	✓	✓	✓

Set DNS Server address	✓	✓	✓	✓
Built-in Webpage	✓	✓	✓	✓
Parameter Setting	network setting protocol/ WEB setting/AT command			
<b>Transmission Mode</b>				
Transparent Transmission	TCP Server/TCP client/UDP Server/UDP Client/Double SOCKET mode			
HTTPD protocol	✓	✓	✓	✓
MODBUS gateway	✓	✓	✓	✓
Websocket	✓	✓	✓	✓
Self- Custom Webpage	✓	✓	✓	✓
RFC2217	✓	✓	✓	✓
Self-Custom Register Packet	✓	✓	✓	✓
Self-Custom heartbeat packet	✓	✓	✓	✓
Self-Custom MAC	✓	✓	✓	✓
Timeout reboot	✓	✓	✓	✓
Short connection	-	-	-	-
Connect clear buffer	✓	✓	✓	✓
<b>Transmission performance</b>				
Client number that TCP Server supports	8	8	8	8
Network Sending Buffer	16K byte	16K byte	16K byte	16K byte
Network Receiving Buffer	16K byte	16K byte	16K byte	16K byte
Serial Port Sending Buffer	2K byte	2K byte	2K byte	2K byte
Serial Port Receiving Buffer	2K byte	2K byte	2K byte	2K byte
Serial Port Package	Default 4 bytes package time, 1460 bytes package length. Time and length is setttable.			
Average Transmission delay	<10ms(in local network)			
<b>Relevant Software</b>				
USR-VCOM	✓	✓	✓	✓
USR-Cloud	✓	✓	✓	✓
Setting Software	✓	✓	✓	✓
<b>Reliability</b>				
Power Protection	Protection of opposite connection ESD and surge protection	Protection of opposite connection ESD aerial discharge:15KV surge:4KV (8/20us) train of impulse:1.5KV, 100KHZ	Protection of opposite connection ESD and surge protection	Protection of opposite connection ESD and surge protection
network port protection	-	ESD contact discharge: 8KV Surge:4KV(10/700us)	-	-
Serial Port Protection	RS-485: ESD protection 2KV, lightning protection overcurrent protection	ESD contact discharge: 8KV Surge:4KV(8/20us)	RS-485: ESD protection 2KV	RS-485: ESD protection 2KV
Certificate	CE,FCC,ROHS	CE,FCC	CE,FCC	CE,FCC,ROHS