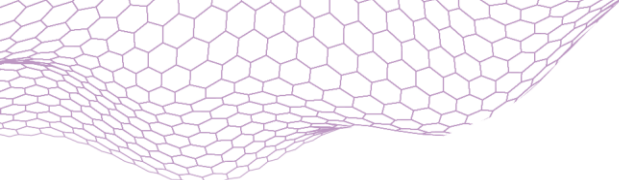




2 SERIAL PORT TO 2 MODBUS TCP PORT GATEWAY

DDSE SERIES





SYNOPSIS

- DDSE SERIES ARE MODBUS GATEWAYS DESIGNED FOR INTEGRATING MODBUS RTU/ASCII AND MODBUS TCP NETWORKS.
- THEY CAN ACHIEVE THE CONVERSION BETWEEN MODBUS RTU/ASCII AND MODBUS TCP PROTOCOLS.
- MODBUS GATEWAY SUPPORTS MULTIPLE NETWORK PROTOCOLS, SUCH AS MODBUS, TCP, IP, UDP, TELNET, ARP, ICMP, HTTP, HTTPS, SNMP, SSH, SMTP, SNTP, DNS AND DHCP PROTOCOLS.
- IT POSSESSES COMPLETE MANAGEMENT FUNCTION, AND SUPPORTS ACCESS CONTROL, RAPID CONFIGURATION, ONLINE UPGRADING, ETC.
- RTU MASTER, RTU SLAVE, ASCII MASTER, ASCII SLAVE AND OTHER OPERATING MODES ARE SUPPORTED; IT SUPPORTS UP TO 256 MODBUS TCP CLIENT (MASTER) ACCESSES AND CONNECTS UP TO 128 MODBUS TCP SERVER (SLAVE) DEVICES.
- TELNET, WEB, SSHD AND OTHER ACCESS MODES ARE ALSO SUPPORTED.
- RESET BUTTON OR DIP SWITCH IS FOR RESTORING FACTORY DEFAULTS. EACH SERIAL PORT IS EQUIPPED WITH AN EXCLUSIVE ISOLATION.

GENERAL FEATURES

- SUPPORT NETWORK MODES SUCH AS REDUNDANT MODE, SWITCHING MODE AND DUAL IP MODE TO MEET THE NEEDS OF VARIOUS NETWORK ENVIRONMENTS
- SUPPORT 12 TO 48VDC DUAL POWER SUPPLY INPUTS
- SUPPORT -40 TO 75°C WIDE OPERATING TEMPERATURE RANGE

FEATURES AND BENEFITS

- SUPPORT 2 10/100BASE-T(X) AUTO NEGOTIATION ETHERNET INTERFACES AND PROVIDE DUAL IP AND MAC ADDRESSES TO MEET THE REQUIREMENTS OF MULTI-NETWORK MANAGEMENT OR NETWORK BACKUP
- SUPPORT 110BPS TO 115200BPS (CUSTOMIZABLE 921600BPS) LINE SPEED AND NON-BLOCKING COMMUNICATION
- SUPPORT RTS/CTS, DTR/DSR AND XON/XOFF FLOW CONTROL
- SUPPORT RESPONSE TIMEOUT SETTING OF CHARACTERS
- SUPPORT RTU MASTER, RTU SLAVE, ASCII MASTER, ASCII SLAVE AND OTHER OPERATING MODES
- SUPPORT UP TO 256 MODBUS TCP CLIENT (MASTER) ACCESSES AND CONNECT UP TO 128 MODBUS TCP SERVER (SLAVE) DEVICES
- SUPPORT VIRTUAL AND REAL ID MAPPING TO ACHIEVE FLEXIBLE ACCESS BETWEEN MASTER AND SLAVE DEVICES
- SUPPORT IP ADDRESS AND MAC ADDRESS FILTERING, WHICH CAN ACHIEVE ACCURATE ACCESS CONTROL EASILY
- SUPPORT GRADED USER MANAGEMENT TO IMPLEMENT HUMANIZED AUTHORITY MANAGEMENT
- SUPPORT SERIAL PORT STATUS AND PARAMETERS MONITORING, ENSURING THE COMMUNICATION STATUS IS EASY TO READ
- SUPPORT MULTIPLE CONFIGURATION FORMS AND ACCESS CONTROLS LIKE WINDOWS CONFIGURATION TOOL, TELNET, SSHD AND WEB
- FILE MANAGEMENT IS CONVENIENT FOR THE DEVICE RAPID CONFIGURATION AND ONLINE UPGRADING SSHD AND HTTPS CAN GUARANTEE THE ACCESS SECURITY OF DATA
- CONDUCT NETWORK DIAGNOSIS AND TROUBLESHOOTING VIA PING AND TRACEROUTE
- SUPPORT MULTIPLE ALARM METHODS, INCLUDING E-MAIL ALARM, LOG ALARM AND SNMP TRAP ALARM

TECHNICAL SPECIFICATIONS

ETHERNET

Standard	10Base-T, 100Base-TX
Protocol	Modbus TCP, TCP, IP, UDP, ARP, HTTP, TELNET, SNMP, ICMP, DHCP, DNS
Rate	10/100M Automatic Flow Control, MDI/MDI-X Auto Negotiation.
Ports	2
Interface form	RJ45
Duplex mode	Full/Half Duplex Mode Self-adaption

SERIAL PORT

Standard	EIA RS-232C, RS-485, RS-422
Protocol	Modbus RTU/ASCII
Ports	2. RS232/485/422 Serial ports
RS-232 signal	DCD, DSR, RTS, GND, TXD, RXD, CTS, DTR RS-485 signal: D+, D-, GND
RS-422 signal	T+, T-, GND, R+, R-
Baud rate	110bps-15200bps (customizable 110bps to 921600bps)
Data bit	7bit, 8bit
Parity bit	None, Even, Odd, Space, Mark Stop bit: 1bit, 2bit
Connectors	RS-232 is DB9M. RS-485/422 is 5 pins 5.08mm pitch terminal blocks
Flow control	RTS/CTS, DTR/DSR, XON/XOFF
Directional control	RS-485 direction adopts Automatic Data Direction Control technology
Pull high/low resistor for RS-485	4.7kΩ
Electromagnetic isolation strength	3KVDC/2KVrms
Operating mode	RTU Master, RTU Slave, ASCII Master and ASCII Slave Connection quantity: support up to 256 Modbus TCP client (master) accesses and connect up to 128 Modbus TCP server (slave) devices

OTHERS

Configuration Method	WEB configuration management, TELNET configuration, Windows configuration tool, SSHD configuration
Security	User right classification, IP address filtering, MAC address filtering, SNMP/ Mail /System Log alarm, HTTP/HTTPS/SSHD/TELNET access control
Indicator	Power supply indicator, running indicator, Ethernet port indicator, serial port indicator

POWER

Power Input	Redundant 12 to 48VDC, 4 Pin 5.08mm pitch Terminal blocks, Reverse polarity protection
Power Consumption	No Load: 1.7W@12V Full Load: 2.0W@12V

ENVIRONMENT

Working Temperature	-40°C to 75°C
Storage Temperature	-40°C to 85°C
Humidity	5% to 95% non-condensing

PHYSICAL

Housing	IP40 protection, metal
Installation	DIN rail mounting
Weight	≤ 500g
Dimensions (W x H x D)	33mm×138mm×110mm

APPROVALS & STANDARDS TESTED FOR

IEC 61000-4-2	Electrostatic Discharge: Level 3 ±6kV (contact), ±8kV (air)
IEC 61000-4-4	Electrical Fast Transient-Level 3 Power Supply: ±2.0KV Signal: ±1.0KV
IEC 61000-4-4	Surge Immunity Level 3 Power supply: common mode±2kV, differential mode±1kV Signal: common mode ±1kV, differential mode ±1kV
IEC 60068-2-27	Shock
IEC 60068-2-32	Drop (Freefall)
IEC 60068-2-64	Vibration

ORDERING INFORMATION

DDSE I M 2 D TD

DDSE	Databridge Dynamic Base model for Serial to Ethernet
I	I: 2 KV Isolated
M	Modbus TCP Gateway
2	2 Port RS232/RS485/RS422 to-Dual Ethernet Gateway
D	D: DB9 Connector
TD	Fixed