

# RDS-3166G

Industrial 16 secure serial ports to Ethernet device server with 16xRS-232/422/485 and 4x10/100/1000Base-T(X) and 2x100/1000Base-X, SFP socket

# Features

- Operating Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP, Modbus Gateway
- > Support 16xRS-232/422/485 in RJ48 connector
- Provide 4 Gigabit Ethernet ports and 2 Gigabit Fiber ports in SFP socket
- Redundant multiple host devices:
  - 5 host devices: Virtual COM, TCP Server, TCP Client mode; 4 IP ranges: UDP
- Support Modbus Gateway : Modbus TCP, Modbus RTU, Modbus ASCII
- Security: SSL data encryption; secured management by HTTPS and SSH
- > Supports 9.6K Bytes Jumbo Frame
- Built-in 15 KV ESD protection for all serial signals
- Event Warning by Syslog, SNMP trap, Relay and Beeper
- Standard 1U rackmount size
- Configurable by Web-based and Windows utility (DS-Tool)
- Various Windows O.S. supported:
  Windows NT/2000/ XP/ 2003/VISTA(32/64bit)/ Windows 7(32/64bit)







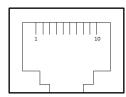
#### Introduction

RDS-3166G is an innovative secure 16 port RS-232/422/485 to 6 ports LAN secure device server with standard features of device server, such like TCP/IP interface and versatile operation modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP and Modbus Gateway. In addition, the Windows untility, DS-Tool, could configure multiple devices and set up the mappings of Virtual Com. RDS-3166G, is not only a traditional device server, it also includes the function of Modbus Gateway to convert Modbus TCP to Modbus RTU/ASCII which allows it to be installed in various different application field. On the other hand, RDS-3166G can simultaneously transfer data up to 5 redundant host PCs to aovid Ethernet connection breakdown or any host PC fails. Further, RDS-3166G features HTTPS, SSH, and SSL encryption to assure the security of critical data transmission.

RDS-3166G, the rackmount device which supports  $4\times10/100/1000$ Base-T(X) and  $2\times100/1000$ Base-X SFP ports. The two Gigabit fiber ports provide high bandwidth and long distance for the use of backbone connection. With wide operating

temperature, -40~70°C, RDS-3166G series could operate in the harsh industrial environment. Therefore, RDS-3166G is the best solution to the high demand of secure serial to Ethernet critical data communication.

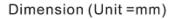
#### **Pin Definition**

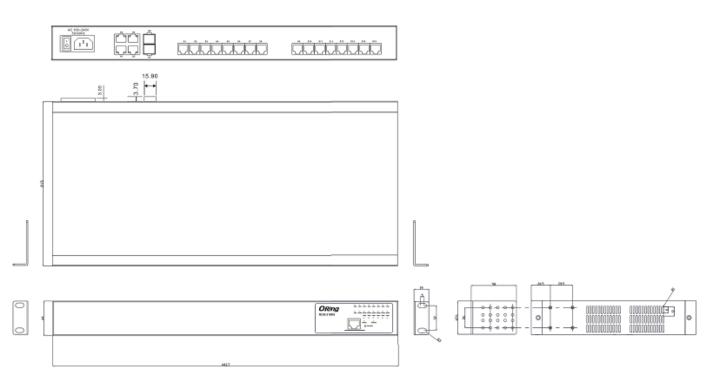


10-pin RJ48 connector

Pin #	RS-232	RS-422	RS-485 ( 4 wire )	RS-485 ( 2 wire )
1	NC	NC	NC	NC
2	DCD	TXD -	TXD -	DATA-
3	RXD	TXD +	TXD +	DATA+
4	TXD	RXD +	RXD +	
5	DTR	RXD -	RXD -	
6	GND	GND	GND	
7	DSR			
8	RTS			
9	CTS			
10	RI			

#### Dimension





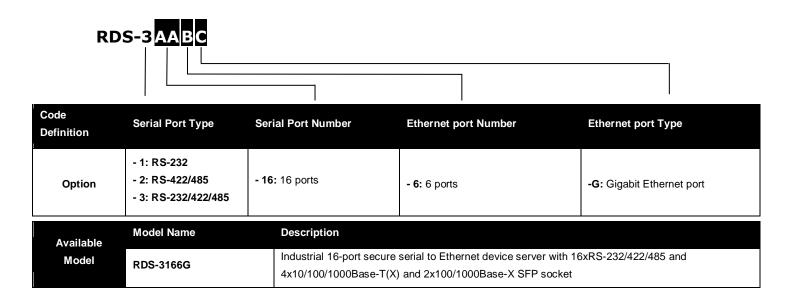
## Specifications

4        2        RS-232 in RJ45 connector. 115200bps, 8, N, 1        485        1.6 Kbps        one, mark, space        'S, CTS, DTR, DSR, DCD, RI, GND        TS/CTS, DTR/DSR		
2 RS-232 in RJ45 connector. 115200bps, 8, N, 1 485 1.6 Kbps one, mark, space S, CTS, DTR, DSR, DCD, RI, GND		
RS-232 in RJ45 connector. 115200bps, 8, N, 1 485 1.6 Kbps one, mark, space 5, CTS, DTR, DSR, DCD, RI, GND		
485 1.6 Kbps one, mark, space 'S, CTS, DTR, DSR, DCD, RI, GND		
1.6 Kbps one, mark, space S, CTS, DTR, DSR, DCD, RI, GND		
1.6 Kbps one, mark, space S, CTS, DTR, DSR, DCD, RI, GND		
1.6 Kbps one, mark, space S, CTS, DTR, DSR, DCD, RI, GND		
one, mark, space S, CTS, DTR, DSR, DCD, RI, GND		
S, CTS, DTR, DSR, DCD, RI, GND		
S, CTS, DTR, DSR, DCD, RI, GND		
TS/CTS, DTR/DSR		
P, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS		
ytes		
n On: Power is on		
Link/Act indicator. r LED for speed indicator : Green for 1000Mbps, Amber for 100Mbps, Off for 10Mbps		
Serial TX / RX LEDs: Green for Serial port transmitting data, Amber for Serial port receiving data G1~G6 : Green for port Link/Act Fault : indicate unexpected event occurred		
AC with power socket		
ts		
) x 211.5 (D) x 44 (H) mm		
°C (-40 to 185°F)		
°C (-40 to 185°F) °C (-40 to 158°F)		
°C (-40 to 158°F)		
°C (-40 to 158°F)		

Warranty

5 years

### Ordering Information



#### Packing List

• RDS-3166G x 1

• CD x 1

• Quick Installation Guide x 1

- Rack-mount kit x 1
- Power Cable

### **Optional Accessories**

• RJ48DB9 series : RJ-48 to DB9 cable