

## ESCG - Ethernet Serial Client / wireless Bridge for 802.11a/b/g WLAN

### Description:

The ESCG is designed to replace the wirebound serial or ethernet connections to peripheral devices and connect them to a wireless LAN (WLAN). The WLAN connection does not require any changes in hardware or software. Security is guaranteed with encryption algorithms like WEP(64,128). Authentication is implemented conforming to 802.11i (WPA+WPA2) or 802.1x (EAP-PEAP, TTLS, TLS, LEAP)

Because the ESCG can be operated on a switch or a hub, several LAN members can be connected to the WLAN simultaneously. Additionally up to 2 serial devices can be connected to the ESCG which are then able to send and receive data via the WLAN.

Because of its rugged aluminum housing the ESCG is very suitable for industrial environments.

There are different mounting versions available, for bolts and nuts or DIN snap-on rails.

The supply voltage range is 8-30VDC, optional is an isolated input with voltage ranges of 9-36 or 18-75 VDC (for 24V resp. 48V batteries) The power consumption is very low, which makes it perfect for battery powered vehicles. Optional is a relay contact which can be operated via WLAN or LAN. (to wake up sleeping AGVs for example). An isolated pushbutton input is also optional.

The antenna connectors are RP-SMA (opt. TNC, N). Other types on request.

Configuration and monitoring of the ESCG is performed with a web browser or a special Locator-, Config- and Monitor-Program.



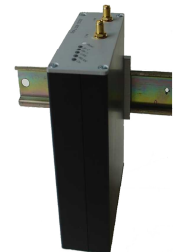
ESCG-SE-2RS



ESCG-SEL-2RSMA

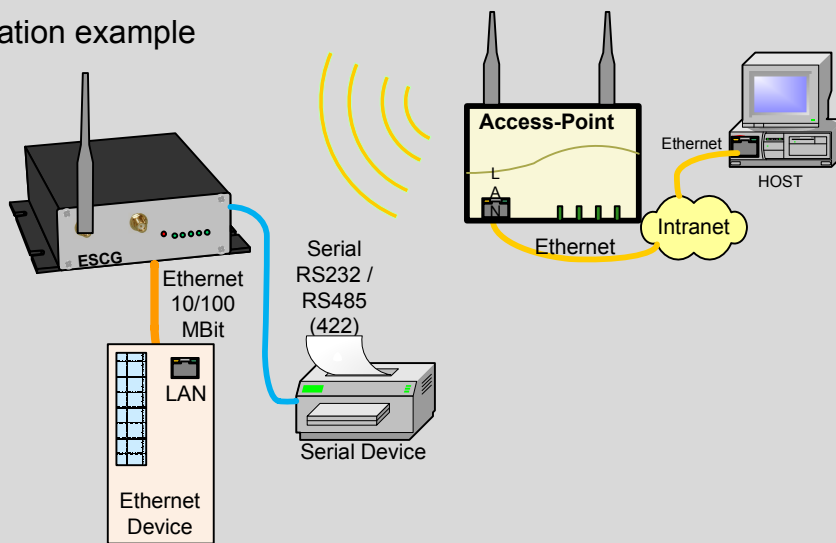


ESCG-SEHW-2RSMA



ESCG-SEHS-2RSMA

### Application example



### Specifications:

Processor	32Bit, 250MHz, 4MByte Flash
Ethernet	10-100MBit Auto MDI/MDIX
Serial Interface	1 x RS232, 300 - 115,2k Bit/s, RTS, CTS, DSR, DTR, DCD, RI opt. RS485 / RS422 up to 2Mbit/s opt. 2. serial interface with RS232
Relay	1 x Contact (open or close), max 1A@24V, max 125VAC
Input	isolated with optical coupler
Powersupply	8-30VDC, optional 9-36 VDC / 18-72VDC isolated, <3W
Temp. range	0 - 70° C
Dimensions	105x125 x 40mm
Weight	ca. 470g

### WLAN Interface:

Bridge Function	max. 50 Clients, ARP, IP
Encryption	64, 128Bit WEP / AES
Security	WPA (WiFi Protected Access) (PSK/TKIP/AES) 802.1x PEAP, TLS, TTLS, LEAP
Datarates	802.11b 11, 5.5, 2 1 MBit/s 802.11g 54, 48, 36, 24, 18, 12, 9, 6 MBit/s 805.11a 54, 48, 36, 24, 18, 12, 9, 6 MBit/s
Frequencies	ISM-Band 2.400 GHz - 2.483 GHz U-NII Band 5.150 GHz - 5.350 GHz (ETSI, RegTP indoor) 5.470 GHz - 5.725 GHz (ETSI, RegTP outdoor)
Channels	802.11b/g ETSI: 1-14 (3 non overlapping) 802.11a: ETSI 19 non overlapping
Transmit power	802.11b/g 18dBm peak 802.11a: 18 or 17dBm

### Ordering descriptions:

**basic configuration:** Black aluminium housing, CM9 RF-Card  
ESCG-SExx-x 1 RPSMA antenna connector, 1xRS232  
1x100/10Mbit LAN

#### housing options:

- HW DIN clip horizontal
- HS DIN clip upright
- L Housing with fixing strips

#### device option:

- R M8 Connector (3pol) for the powersupply
- 24V 24V (9-36V) DC/DC converter isolated
- 48V 48V (18-72V) DC/DC converter isolated
- 2RSMA 2. antenna connector RP SMA
- 1TNC 1 antenna connector TNC
- 2TNC 2 antenna connector TNC
- 2RS 2 serial interface
- REL Relay + inputline connected via 4pol. M8