

## SmartStart SL305

Entry-Level Router



### Features

- LTE Category 4 (Cat.4) Cellular Connectivity
- Powerful CPU with 1.3 GB storage to host customer SW applications
- 2x SIM for cellular failover
- 1x ETH, 1x RS232 (DB9 Female)
- 1x Digital Input, 1x Digital Output
- Plastic cover with wall and DIN rail mount options
- Wide operational temperature range
- Sleep mode & Power ignition
- Optional Wi-Fi
- Router App Software customization

### Introduction

The SmartStart SL305 is the latest version of cellular router from SmartStart family routers. The router uses the newest Cat.4 LTE services. SL305 models from the SmartStart line is a cellular router equipped with an extended eMMC storage with 1.3 GB assigned for software customization. The new size of internal memory provides ample storage for custom scripts, software applications, and a wide variety of protocols using Router Apps (User modules), Node-RED or Docker.

Due to the high speed of data transfer up to 150 Mbps (download) and up to 50 Mbs (upload) is an ideal solution for the wireless connection of traffic and security camera systems, individual computers, LAN networks, automatic teller machines (ATM), and other self-service terminals.

SmartStart SL305 is equipped with a powerful microprocessor ARM Cortex-A8 at 1000 MHz. As a standard, SL305 is equipped with one Ethernet 10/100 Mbps port, with one RS232 a port using 9 wires (DB9 Female), with one digital input and one digital output. Optionally can be router equipped with a WiFi module using a 2.4 GHz band. This router contains two SIMs readers, which are placed on the rear side of the device. The device is placed in an original robust plastic case. Customers can use wall mounting or use the supplied DIN holder. The router can be easily installed, monitored by using WebAccess/DMP software. WebAccess/VPN is a perfect way how to provide a fixed IP address and secure the router.



WebAccess/DMP

WebAccess/VPN

RouterApp

### Ordering Information

Order Code	Region	LTE	1x Ethernet	1x RS232	Wi-Fi	I/O	2x SIM
BB-SL30500110	EMEA	✓	✓	✓		✓	✓
BB-SL30510110	EMEA	✓	✓	✓	✓	✓	✓

### Accessories

Order Code	Description	Included in the package	Sold Separately
BB-KN-M04-1.5	SmartStart PS cable 4-wire, 1.35m	✓	✓
BB-SBD25	SmartStart DIN Clip	✓	✓
	Quick Start Guide	✓	
*ANT-LTE5G-025	Antenna 5G/LTE, Terminal, SMA-M		✓
*BB-GA.110.101111	LTE Magnet Mount Antenna, 1m cable		✓
B-AW-A2458G-FSRPK	Wi-Fi Antenna 2.4 & 5.8 GHz		✓
BB-RPS-M04-EU	Power Supply, 12V/1A, EU plug		✓
BB-RPS-M04-M	Power Supply, 12V/1A, EU,UK,US,AUS plugs		✓

\*2 antennas are required for optimal LTE performance

### Specifications

System	
CPU	ARM Cortex-A8, 1000 MHz
Memory	RAM - 512 MB eMMC - 4096 MB (838 MB for Router App, 512 MB for customer data)
Watchdog	HW Watchdog
RTC	Battery backup RTC
Interfaces	
Ethernet	1× Ethernet, RJ45, 10/100 Mbps, 1.5 kV
Serial Lines	1× RS232 (DCD, RxD, TxD, DTR, GND, RTS, CTS) DB9 Female
I / O	1× Digital Input (0 to 0.7 log 0, 1.6 V to 36 VDC log 1) 1× Digital Output (max current 200 mA) (4-Way Molex Micro-Fit connector)
Reset Button	Factory reset
LED Indicators	Power, Data activity, Signal strength, Ethernet activity

Environmental	
Power Supply	9 – 36 V DC (4-Way Molex Micro-Fit connector)
Consumption	Average 2.1 W / Maximum 4.8 W
Consumption with WiFi	Average 2.7 W / Maximum 5.5 W
Sleep Mode	Yes, 50 mW
Operating Temperature	-40 to +75 °C / WiFi version -25°C to +55°C
Storage Temperature	-40 to +85 °C
Humidity	0 to 95 %
IP Cover	IP30
Physical Characteristics	
Dimensions	30 × 87 × 150 mm
Enclosure	Plastic Case
Mounting	Wall Mounting, DIN Rail
Weight	200 g

WiFi (*Optional BB-SL30510110)	
Antenna	1× R-SMA connector
Standards	IEEE 802.11 b/g/n 2.4 GHz
Security	WEP, WPA, WPA2, 802.1X
Modes	Access Point, Station

Cellular Interface	
SIM Slots	2× SIM (Mini SIMs – 2FF)
Antennas	2× SMA connector (1× Main, 1× Diversity)
LTE Parameters	Supported FDD frequencies: B1 (2100 MHz), B3 (1800 MHz), B7 (2600 MHz), B8 (900 MHz), B20 (800 MHz), B28A (700 MHz) Supported TDD frequencies: B38 (2600 MHz), B40 (2300 MHz), B41 (2500 MHz) Transfer rate: 150 Mbps (DL), 50 Mbps (UL)
HSPA+ Parameters	Supported frequencies: B1 (2100 MHz), B8 (900 MHz) Transfer rate: 42 Mbps (DL), 5.76 Mbps (UL)
UMTS Parameters	Supported frequencies: B1 (2100 MHz), B8 (900 MHz) Transfer rate: 384 kbps (DL), 384 kbps (UL)
EDGE/GPRS Parameters	Supported frequencies: B3 (1800 MHz), B8 (900 MHz) Transfer rate: 296 kbps (DL), 236.8 kbps (UL)

Standards & Regulations	
Radio	EN 301 511, EN 301 908-1, EN 301 908-2, EN 301 908-13, EN 300 328
EMC	EN 301 489-1, EN 301 489-17, EN 301 489-52, EN 55032 class B, EN 61000-6-2, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6
Safety	EN 62368-1
Transportation	E-Mark E8 homologation number: 10R – 04 8634
National	CE, UKCA
Mechanical	EN 60068-2-27, EN 60068-2-64, EN 60529
Climatic	EN 60068-2-1, EN 60068-2-2, EN 60068-2-14, EN 60068-2-30
Environmental	REACH, RoHS3, WEEE

# Industrial Cellular Routers & Gateways

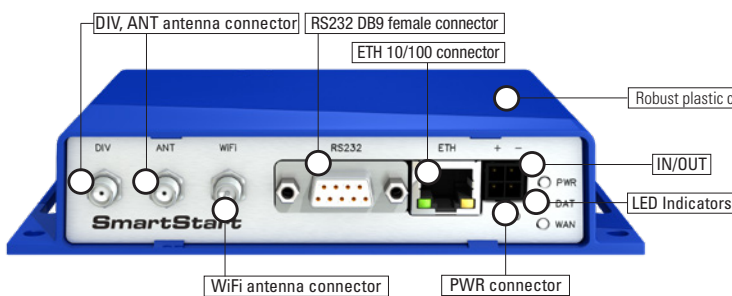
## SmartStart SL305

Software	
Operating System	Conel OS (Linux based)
SW Customization	Router App (User Modules)*
Application Development	Open Linux, *Python, BASH, C/C++, *Node-RED, *Docker
Networking Protocols	IPv4, IPv6, PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, *RIP, *BGP, *OSPF, *IS-IS, ICMP, NAT, HTTP, HTTPS, DNS, ARP, NTP, SMTP, Telnet, VLAN, SSH, DDNS, Telnet, MQTT
Industrial Protocols	*Modbus RTU/TCP gateway, *IEC 60870-5-101 to 104 gateway, *DF1, *DNP3
Networking Features	DHCP, NAT/PAT, VRRP, Dynamic DNS client, DNS proxy, VLAN, QoS, *DMVPN, *WOL, NTP Client/Server, Backup Routes, Port Forwarding, Host Port Routing, Ethernet Bridging, Load Balancing, IPv6 Dual Stack
Security	HTTPS, SSH, SFTP, DMZ, Firewall (IP Filtering, MAC address filtering, Inbound and outbound Port filtering) VPN Tunneling – WireGuard, OpenVPN, *EasyVPN, IPsec with IKEv1 and IKEv2, GRE, L2TP, PPTP Authentication – RADIUS, TACACS+, *SCEP Encryption – DES, 3DES, AES, RSA, MD5, SHA
Firmware Management	Automatic firmware updates – server, locally via LAN or remotely via WAN Over-the-Air cellular module firmware updates
Diagnostic/Log	Status – Signal Strength, Data Usage, Detailed Long Term Statistics One CLICK report – Current Configuration, Factory Identification, Routing Table Log – System Log, Reboot Log, Kernel Log Remote Diagnostics (via SSH)
Event Engine	StartUp script & Up/Down script (Own rules based on Digital Inputs, Network Parameters, Data Usage, Timer, Power, Device Temperature) Report Types: SMS, email, SNMP Trap
Configuration	Web server, SSH, Four configuration switchable profiles, Automatic configuration update from server, Backup & Restore configuratio
Advanced Software Tools	WebAccess/DMP – Remote Device Provisioning, Monitoring & Management Platform WebAccess/VPN – Advanced Secure Networking Platform

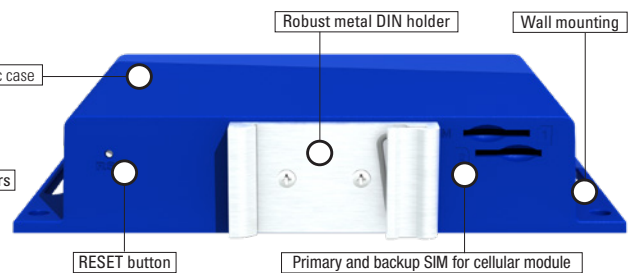
\*Functionality is available with installed Router App (User Module)

## Views

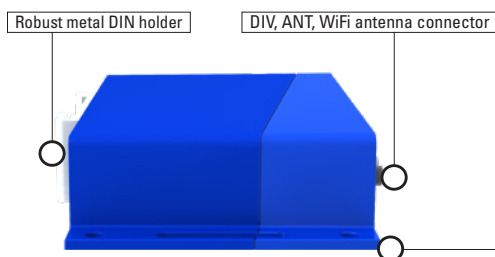
**FRONT VIEW**



**REAR VIEW**



**LEFT SIDE VIEW**



**RIGHT SIDE VIEW**



### Dimensions - Technical Drawing

