

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
- 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, Node-RED or Docker.

Due to the high speed of data transfer up to 150 Mbps (download) and up to 50 Mbps (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. 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 | I/O | 2x SIM |
|---------------|--------|-----|-------------|----------|-----|--------|
| BB-SL30500110 | EMEA | ✓ | ✓ | ✓ | ✓ | ✓ |

* - The router is compatible with cellular networks in the indicated region. The importer/operator needs to check locale legislation (standards, national Telecom approvals, etc.) and compare with standards available for the product if possible to operate the router in the target region legally.

Accessories

| Order Code | Description | Included in the package | Sold Separately |
|-----------------|--|-------------------------|-----------------|
| BB-KN-M04-1.5 | Power cable 4-wire, 1.35m | ✓ | ✓ |
| BB-SBD25 | DIN Clip | ✓ | ✓ |
| *ANT-LTE5G-025 | Antenna 5G/LTE, Terminal, SMA-M | | ✓ |
| *ANT-LTEMG3-150 | LTE Magnet Mount Antenna | | ✓ |
| BB-RPS-M04-EU | Power Supply, 12V/1A, EU plug | | ✓ |
| BB-RPS-M04-M | Power Supply, 12V/1A, EU,UK,US,AUS plugs | | ✓ |

For more Antenna accessories visit www.advantech.com

*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 |
| Sleep Mode | Yes, 50 mW |
| Operating Temperature | -40 to +75 °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 |

| 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

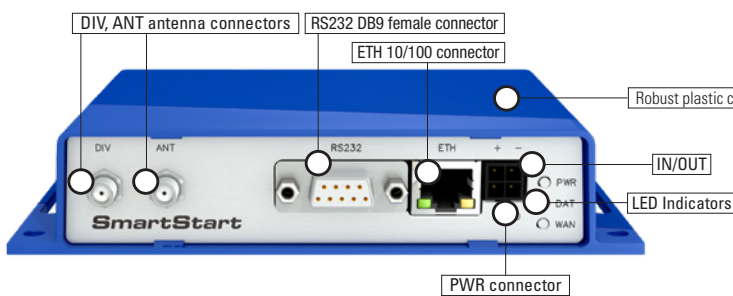
SmartStart SL305

| Software | |
|-------------------------|--|
| Operating System | ICR-OS (Linux based) |
| SW Customization | Router App* |
| 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 |

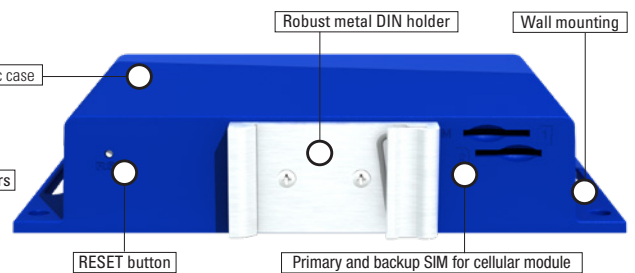
*Functionality is available with installed Router App

Views

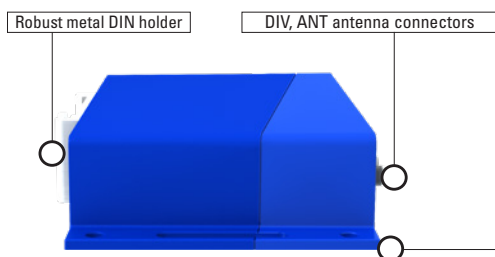
FRONT VIEW



REAR VIEW



LEFT SIDE VIEW



RIGHT SIDE VIEW



Dimensions - Technical Drawing

