SmartStart SL30
INTELLIGENT 4G LTE ROUTER & GATEWAY

ADVANTECH

+ For data applications
+ Ethernet, serial RS-232 and I/O for connecting a wide array of field assets with DIN rail or wall mounting
+ Low power consumption for solar and battery power applications
+ Exceptionally resilient wireless and wired connection
+ Enhanced memory to host custom software applications and a wide variety+ of protocols
+ Easy deployment, mass maintenance and troubleshooting with Advantech remote management and monitoring tools
+ Loaded with advanced features to secure your data

The SmartStart™ LTE family of cellular routers and gateways are the perfect way to connect RS-232 and Ethernet devices to a cellular network. Industrial M2M and IoT applications include Ethernet lottery machines, ATM stations, kiosks, gaming terminals along with RS-232 traffic controllers, meters, UPS systems, PLCs and much more.

The processor is powerful enough to handle the full range of LTE communications capabilities, including video streams. The internal memory provides ample storage for custom scripts, software applications and a wide variety of protocols. In addition to its Ethernet and RS-232 ports, SmartStart™ has built-in digital I/O connectivity. Competing routers in the same price range generally provide only Ethernet or RS-232. StartSmart™ provides all three.

SmartStart™ combines best-in-class power consumption with LTE performance and is optimized for solar and battery powered applications. Low Power Mode extends battery life by dropping power consumption to 40 mW, and can be triggered by timers, low voltage detection or I/O. SmartStart™ is the industry's only cellular gateway with power consumption equivalent to 2G devices. It is DIN rail and panel mountable. The router supports VPN tunnel creation using various protocols to ensure safe communications. The router provides diagnostic functions which include automatic monitoring of the wireless and wired connections, automatic restart in case of connection losses, and a hardware watchdog that monitors the router status.

SmartStart™ is an excellent fit for applications that are migrating to LTE technology. SmartStart™ provides fallback to 3G/2G technologies to ensure that connectivity is reliable in areas where LTE is still under development. This futureproofs your existing installations and protects your investment. You can upgrade your systems according to your own schedule, as SmartStart™ will continue to connect your legacy devices, even after the cellular providers sunset their 2G and 3G cellular networks.

SmartStart™ is easy to install using WebAccess/DMP, a full featured configuration and monitoring tool. Our VPN configuration tool, SmartCluster™, makes it easy to configure multiple routers via the same VPN tunnel.

ORDERING INFORMATION – Antennas & Power Supplies Sold Separately

MODEL NO. - ORDER CODES	NAM* LTE CAT.1	EMEA & LATAM LTE CAT.4	1X ETHERNET	RS232	I/O	2X SIM	WI-FI	SMARTWORX HUB
SL30200110-X	✓		✓	✓	✓	✓		
SL30210110-X	✓		✓	✓	✓	✓	✓	
SL30200110-XSWH	✓		✓	✓	✓	✓		✓
SL30210110-XSWH	✓		✓	✓	✓	✓	✓	✓
SL30400110		✓	✓	✓	✓	✓		
SL30410110		✓	✓	✓	✓	✓	✓	
SL30400110-SWH		✓	✓	✓	✓	✓		✓
SL30410110-SWH		✓	✓	✓	✓	✓	✓	✓

* North America

All product specifications are subject to change without notice.
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ACCESSORIES - INCLUDED

ORDER CODE	DESCRIPTION
BB-KN-M04-1.5	SmartStart PS cable 4-wire, 1.35m
BB-SBD25	SmartStart DIN Clip
	Quick Start Guide

ACCESSORIES - SOLD SEPARATELY

ORDER CODE	DESCRIPTION
*BB-GA.110.101111	Antenna LTE, Magnet Mount
*BB-TG.10.0113	LTE 4G/3G/2G Terminal Antenna
BB-AW-A2458G-FSRPK	Antenna Wi-Fi 2.4 & 5.8 GHz
BB-RPS-M04-M	PS, SmartStart, 12V/1A
BB-KD-2	Data cable RJ45 - DB9 RS232 - 1,5m

*2 antennas are required for optimal LTE performance

SPECIFICATIONS

NETWORKING	
Network and Routing	DHCP Server, NAT/PAT, VRRP, Dynamic DNS client, DNS proxy, VLAN, QoS, DMVPN, NTP Client/ Server, IGMP, BGP, OSPF, RIP, SMTP, SMTPS, SNMP v1/ v2c/ v3, Backup Routers, PPP, PPPoE, SSL, Port Forwarding, Host Port Routing, Ethernet Bridging
Security	HTTPS, SSH, VPN tunnels, SFTP, DMZ, Firewall (IP Filtering, MAC address filtering, Inbound and outbound Port filtering)
VPN Tunnelling	Open VPN client and server and P2P, L2TP, PPTP, GRE, EasyVPN, IPSec with IKEv1 and IKEv2
Configuration	Web server, SSH, Four configuration switchable profiles, Automatic configuration update from server, Backup configuration, Restore configuration
Firmware Management	Automatic firmware update from server, Locally via LAN or remotely OTA (HTTP, HTTPS), Over-the-Air software updates, Over-the-Air cellular module update from FW
Diagnostic	One CLICK report - current configuration / factory identification / system log / kernel log / reboot log / routing table, Remote diagnostics possible via SSH
Status	Network Status, DHCP Status, IPSec Status, Statistics history for last 60days
Log	System Log, Reboot Log, Kernel Log
Controlling and Diagnostic	SMS, SNMP v1/v2c/v3, Statuses
Event Engine	StartUp script & Up/Down script (Bash, Python), Digital Input, Network Parameters, Data Usage, Timer, Power, Device Temperature. Report Types: SMS, email, SNMP Trap
Other	Support of IPv6

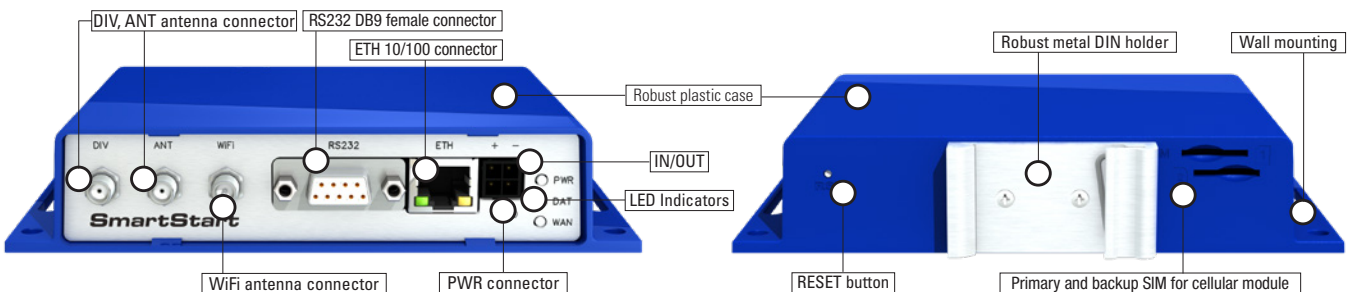| PORTS, LED, ANTENNAS	
Ethernet	RJ45, 10/100 Mbps, 1.5kV RMS
SIM	2 Mini SIMs (2FF)
LED indicators	PWR, DAT, WAN, ETH
2x ANT	SMA connectors
WiFi antenna - *optional	R-SMA connector
RS232	DB9 Female
I/O	1x Digital Input On Voltage: 2.7V to 36VDC (4-Way Molex moni-fit connector)

MECHANICAL	
Plastic case with metal DIN rail	Plastic
Enclosure Dimensions	87x30x127mm (150mm including wall month sides)
Weight	187 g

R-SEENET™

Router Management Software consisting of two parts:

R-SeeNet Server application can be programmed to automatically send SNMP queries (Simple Network Management Protocol) to each router defined in the network. The application retrieves status information from the routers and records it in the SQL database.

R-SeeNet PHP is a web-based application that accesses the SQL database and provides the network administrator detailed information on individual routers and network health.

DIV, ANT antenna connector
RS232 DB9 female connector
ETH 10/100 connector
Robust plastic case
IN/OUT
LED Indicators
DIV ANT WIFI RS232 ETH + –
PWR
DAT
WAN
SmartStart
WiFi antenna connector
PWR connector

Robust metal DIN holder
Wall mounting
RESET button
Primary and backup SIM for cellular module

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SPECIFICATIONS · CONTINUED

POWER, CONSUMPTION, ENVIRONMENTAL, IP COVER

Power Supply	9–36VDC (4-Way Molex moni-fit connector)
Power Consumptionwith WiFi - Average/Peak/Sleep Mode	2,7 / 5.5 W / 40 mW
Power Consumption without WiFi - Idle/Average/Peak/Sleep Mode	2,1 / 4.8 W / 40 mW
Current with WiFi	0.65 A Max
Current without WiFi	0.55 A Max
Temperature Range with WiFi – Operating / Storage Temperature Range without WiFi – Operating / Storage	-25 to +55 °C / -40 to +85 °C -40 to +75 °C / -40 to +85 °C
Humidity – Operating / Storage (noncondensing)	0 to 95 % / 0 to 95 %
Cold Start	-40 °C
Operating Altitude	2000 m / 70 kPa
Enclosure Rating	IP30

WiFi

Antenna Connector	R-SMA – 50 Ohms
Supported WiFi Band	2.4 GHz - Number of clients: 55
Standards	802.11b, 802.11g, 802.11n
Encryption	None, WEP, TKIP, AES
Authentication	Open, Shared, WPA–PSK, WPA2–PSK, WPA2-Enterprise, 802.1 - RADIUS
2.4 GHz Supported Channels	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Type of Device	Access point, Client

INDUSTRY CERTIFICATIONS & APPROVALS

Emissions/ Immunity	EN 55022, EN 61000-6-2, ETSI EN 301 489-1 V1.9.2, FCC part 15 class B (all pending)
Safety	Hazardous Locations: EN 60950 Power: EN 61131-2 Vehicle Usage: E-Mark Environmental: RoHS, REACH, WEEE

STANDARDS AND REGULATIONS FOR EMEA ROUTERS - SL304xxxxx

EMC	ETSI EN 301 489-1 V1.9.2, ETSI EN 301 489-1 V2.1.1, Draft ETSI EN 301 489-52 V1.1.0, ETSI EN 301 489-17 V3.1.1
Safety	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 + AC:2011, EN 62311:2008 UL 60950-1, United States and Canada, UL File No.: E486108
E-Mark – EMC for devices in transportation	E-Mark E8 homologation number: 10R – 04 8634
REACH, RoHS and WEEE compliant	

STANDARDS AND REGULATIONS FOR NAM ROUTERS - SL302xxxxx

Industrial	FCC 15.107 Class B, FCC 15.109 Class B, FCC ID 2AIQR-SL302, Contains: FCC ID RI7LE910NAV2. WiFi version contains: FCC ID VRA-SG9011059B. PTCRB IEC 61000-6-2:2005
Safety	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013, EN 62311:2008 UL 60950-1, United States and Canada, UL File No.: E486108
Carrier Approvals	AT&T, Verizon
REACH, RoHS and WEEE compliant	

CELLULAR MODULE PARAMETERS

	SL304 Cat. 4 - EMEA & LATAM	SL302 Cat. 1 - NAM - AT&T, Verizon
LTE parameters	Bit rate 150 Mbps (DL) / 50 Mbps (UL) LTE FDD Cat.4, 3GPP release 9 compliant Supported frequencies: 800 / 900 / 1800 / 2100 / 2600 MHz	Bit rate 10 Mbps (DL) / 5 Mbps (UL) LTE FDD Cat.1, 3GPP release 9 compliant Supported bandwidths: 5 Mhz, 10 Mhz, 20 MHz Supported frequencies: Supported frequencies: 700 MHz (Bd12/Bd13), 850 MHz (Bd5), AWS 1700 MHz (Bd4), 1900 MHz (Bd2)
WCDMA	Bit rate 42.0 Mbps (DL) / 5.76 Mbps (UL) Supported frequencies: 900 / 2100 MHz	Bit rate 42.0 Mbps (DL) / 5.76 Mbps (UL) Supported frequencies: 850 / 1900 MHz
GPRS/EDGE parameters	Bit rate 236 kbps (DL) / 236 kbps (UL) Supported frequencies: 900 / 1800 MHz	-

WebAccess/VPN

WebAccess/VPN is an advanced VPN management solution for safe interconnection of Advantech routers and LAN networks in public Internet. Connection among devices and networks can be regional or global and can combine different technology platforms and various wireless, LTE, fixed and satellite connectivities.

WebAccess/VPN provides an easy and secure connectivity platform for applications such as branch connection,remote access, machine monitoring in industry sectors like Utilities & Energy, Automation, Predictive maintenance, Industrial IoT for any end device types such as Computers, PLCs, RTUs, Cameras, Terminals…

WebAccess/DMP₂

WebAccess/DMP Generation 2 is an advanced Enterprise-Grade platform solution for provisioning, monitoring, managing and configuring Advantech's routers and IoT gateways. It provides a zero-touch enablement platform for each remote device.

With **WebAccess/DMP**, secure zero-touch pre-provisioning and pre-configuration is simple, regardless of how large your deployment is: from one device to thousands. The platform supports full multi-tenancy, with the possibility of permissions-enabled power-user oversight across tenancies.