

+ ROUTERS & GATEWAYS

SmartStart™

NEW INTELLIGENT 4G LTE ROUTER & GATEWAY

PRODUCT FEATURES

- 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 our SmartWorx remote management and monitoring tools
- Loaded with advanced features to secure your data



B+B SMARTWORX

Powered by

ADVANTECH

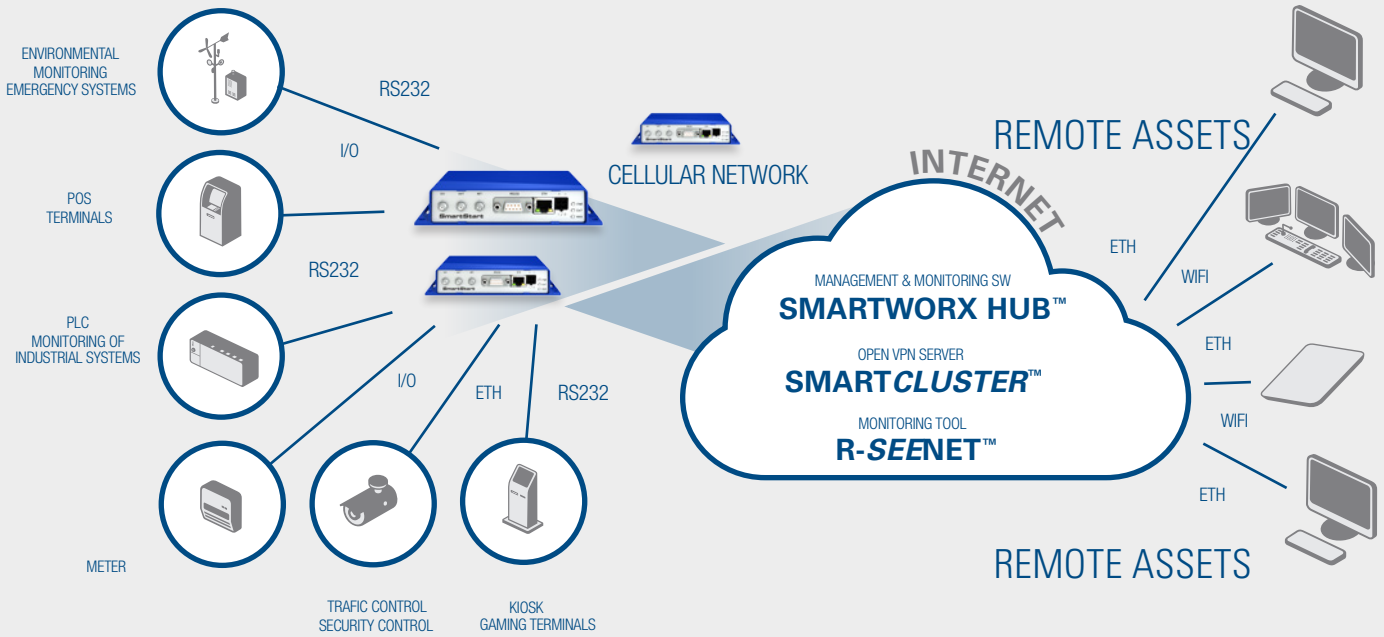
SmartStart™

NEW INTELLIGENT 4G LTE ROUTER & GATEWAY

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, kiosk locations, gaming terminals** along with **RS-232 traffic controllers, meters, UPS systems, PLCs** and much more.



APPLICATIONS



LEADING THE INDUSTRY

The processor is powerful enough to handle the full range of LTE communications capabilities. 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. SmartStart™ provides all three.

SmartStart™ provides best-in-class power consumption combined 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's™ 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 SmartWorx HUB™, a full featured configuration and monitoring tool. Our VPN configuration tool, SmartCluster™, makes it easy to configure multiple routers via the same VPN tunnel.

TECHNICAL SPECIFICATION

Power, Consumption, Environmental, IP cover

| | |
|---|---|
| Power supply | 9 – 36 VDC (4-Way Molex mini-fit connector) |
| Power consumption with 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 | -25 to +55 °C / -40 to +85 °C |
| Temperature range without WiFi – Operating / Storage | -40 to +75 °C / -40 to +85 °C |
| Humidity – Operating / Storage (non condensing) | 0 to 95 % / 0 to 95 % |
| Cold Start | -40 °C |
| Operating Altitude | 2000 m / 70 kPa |
| Enclosure Rating | IP30 |

Cellular module parameters

| | SL306 - ASIA & PACIFIC (available in 2Q 2017) | SL304 - EMEA | SL302 - NAM - AT&T, Verizon |
|----------------------|--|--|---|
| LTE parameters | FDD LTE - Bit rates: UL 50 Mbit/s; DL 150 Mbit/s @20M BW cat4 Supported frequencies: B1 - 2100 MHz, B3 - 1800 MHz, B8 - 900 MHz, all bands with diversity TDD LTE - Bit rates: UL 10 Mbit/s; DL 112 Mbit/s @20M BW cat4 Supported frequencies: B38 - 2600 MHz, B39 - 1900 MHz, B40 - 2300 MHz, B41 - 2500 MHz, all bands with diversity | Bit rate 150 Mbps (DL) / 50 Mbps (UL) LTE FDD Cat.4, 3GPP release 9 compliant Supported frequencies: B20 - 800 / B8 - 900 / B3 - 1800 / B1 - 2100 / B7 - 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: B12, B13- 700 / B5 - 850 / B4 - 1700 / B2 - 1900 MHz |
| WCDMA | WCDMA CS: UL 64 kbit/s; DL 64 kbit/s WCDMA PS: UL 384 kbit/s; DL 384 kbit/s HSPA+: UL 5.76 Mbit/s; DL 21.6 Mbit/s DC-HSPA+: UL 5.76 Mbit/s; DL 42 Mbit/s TD-HSPA: UL 2.2 Mbit/s; DL 2.8 Mbit/s Supported frequencies: 2100 MHz, 850 MHz, 900 MHz, 1700 MHz, all bands with diversity | 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 |
| TD-SCDMA | Bit rates: UL 384 kbit/s; DL 2.8 Mbit/s Supported frequencies: 2000 MHz, 1900 MHz | - | - |
| GPRS/EDGE parameters | Bit rates: GPRS: UL 85.6 kbit/s; DL 85.6 kbit/s EDGE: UL 236.8 kbit/s; DL 236.8 kbit/s Supported frequencies: : 1800 MHz, 900 MHz | Bit rate 236 kbps (DL) / 236 kbps (UL) Supported frequencies: 900 / 1800 MHz | - |

WiFi

WiFi 802.11 b/g/n, AP or Client operating, Supported WiFi band - 2.4 GHz, Number of clients: 55

| WiFi - Authentication/Cipher | Channel width [MHz] | Throughput of TCP [Mbps] |
|--------------------------------------|---------------------|--------------------------|
| WPA2-PSK/AES, WPA-PSK/AES, none/none | 20 | 40 |
| | 40 | 60 |

Standards and regulations for EMEA routers - SL304XXXXX

| | |
|---|---|
| EMC | ETSI EN 301 489-1 v1.9.2, IEC 61000-6-2:2005, IEC 61000-6-3:2006 |
| Safety | EEN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013, EN 62311:2008 |
| e-Mark E8 – EMC for device in transportation | E8 homologation number: 10R – 04 8634 |
| REACH and RoHS compliant | |

SL302XXXXX

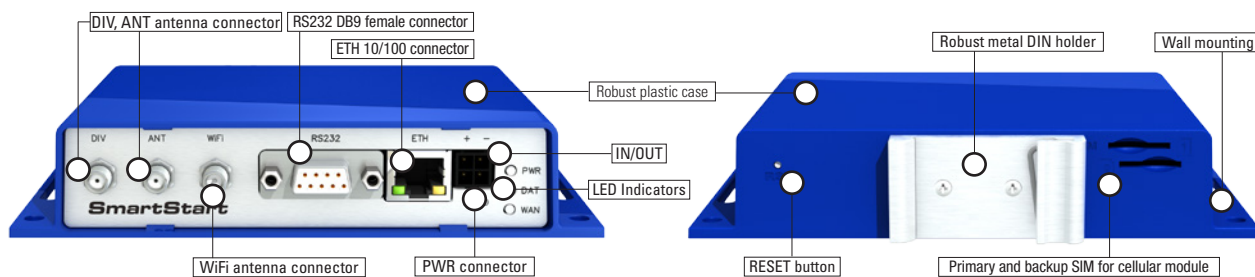
| | |
|--------------------------|--|
| EMC | FCC 15.107 Class B, FCC 15.109 Class B, PTCRB, IEC 61000-6-2:2005 |
| Safety | EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013, EN 62311:2008 |
| Carrier Approvals | AT&T, Verizon |
| REACH and RoHS compliant | |

Mechanical

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

| Features | |
|----------------------------|--|
| 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 |
| Support and Warranty | 3 years warranty, Free device software upgrades, Optional warranty extension |
| Other | Support of IPv6 |

| Ports, LED, Antennas | |
|--------------------------|--|
| ETH | RJ45, 10/100 Mbps, 1.5kV RMS |
| SIM NAM/EMEA | 1/2 Mini SIMs (2FF) |
| LED Indicators | PWR, DAT, WAN, ETH |
| 2x ANT | SMA connectors |
| WiFi antenna - *optional | R-SMA connector |
| RS232 | DB9 Female |
| I/O | Integrated in 4 way Molex mini connector Configurable I/O pin on power connector 1x Digital Input : 0 to 36 VDC, logic 0: 0 to 0,7 V, logic 1: 1,6 V to 36 V 1x Digital Open Collector Output > sinking 200 mA/ 36 V DC |



ADVANTECH

B+B
SMARTWORX

Worldwide Headquarters

ADVANTECH
No.1, Alley20, Lane26, Rueiguang Road
Neihu District, Taipei 11491
Taiwan, R.O.C
Phone: 0800-777-111
www.advantech.com

European Headquarters

Oranmore, Co. Galway, Ireland
Phone: +353 91 792444
Fax: +353 91 792445
eSales@advantech-bb.com

Corporate Headquarters

707 Dayton Road
Ottawa, IL 61350 USA
Phone: 1-815-433-5100
Fax: 1-815-433-5109
orders@advantech-bb.com
www.advantech-bb.com

Middle East, UAE, Africa

mdeast-afrsales@advantech-bb.com
Mobile: +971 50 943 65 62
AG Silver Tower, JLT, P.O. Box 48777
Dubai, UAE

Cellular Product Group

Sokolská 71, 562 04 Ústí nad Orlicí III.
Czech Republic
Phone: +420 465 524 421
cellularsales@advantech-bb.com

Latin America, Caribbean

latamsales@advantech-bb.com
Phone: 1-727-797-0300
Cell: 1-727-480-5920

OEM & Product Modification

Phone: 815-433-5222
Fax: 815-433-5104
Attn: Custom Dept.
custom@advantech-bb.com
Custom Quote Request Form:
http://advantech-bb.com/custom