

# ROUTERS & GATEWAYS

## **SmartStart™** NEW INTELLIGENT 4G LTE ROUTER & GATEWAY

### PRODUCT FEATURES

- For Industrial IoT and consumer focused high speed 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 our SmartWorx remote management and monitoring tools
- Loaded with advanced features to secure your data



**B+B SMARTWORX**

Powered by

**ADVANTECH**

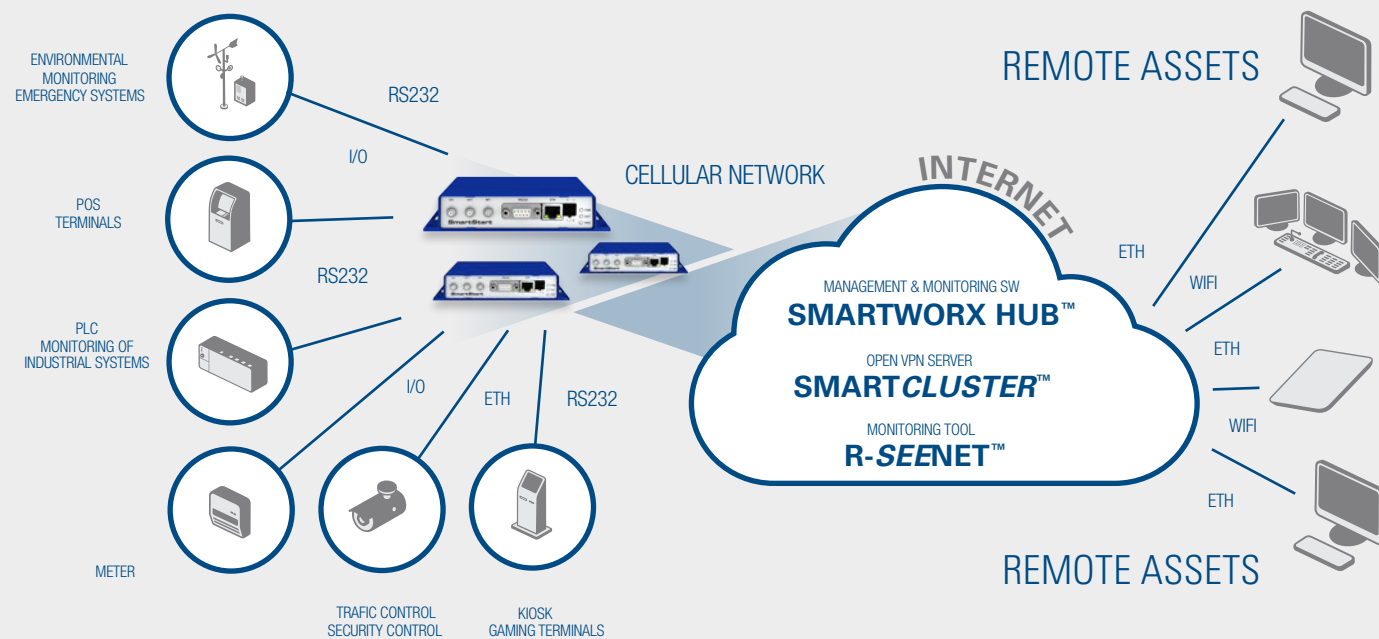
# SmartStart™

## NEW INTELLIGENT 4G LTE ROUTER & GATEWAY

The **SmartStart™** LTE Cat.4 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, 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. 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

#### LTE module for EMEA

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
WCDMA	Bit rate 42.0 Mbps (DL) / 5.76 Mbps (UL) Supported frequencies: 900 / 2100 MHz
GPRS/EDGE parameters	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

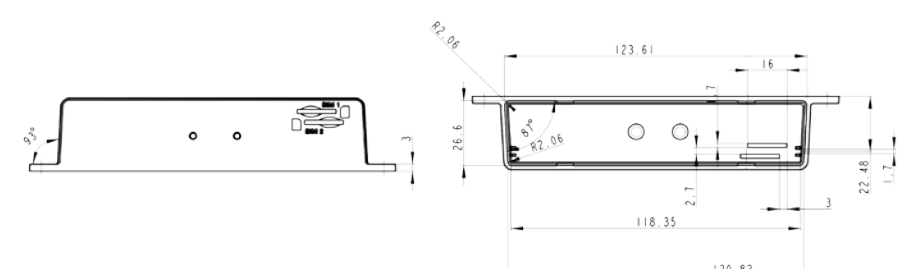
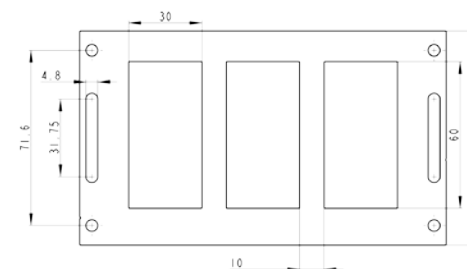
WiFi - Authentication/Cipher	Channel width [MHz]	Throughput of TCP [Mbps]
WPA2-PSK/AES, WPA-PSK/AES, none/none	20	40
	40	60

#### 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

#### Mechanical

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



Router SmartSTART is compatible with:

**R-SEENET**

**SMARTCLUSTER**

**SMARTWORX HUB™**

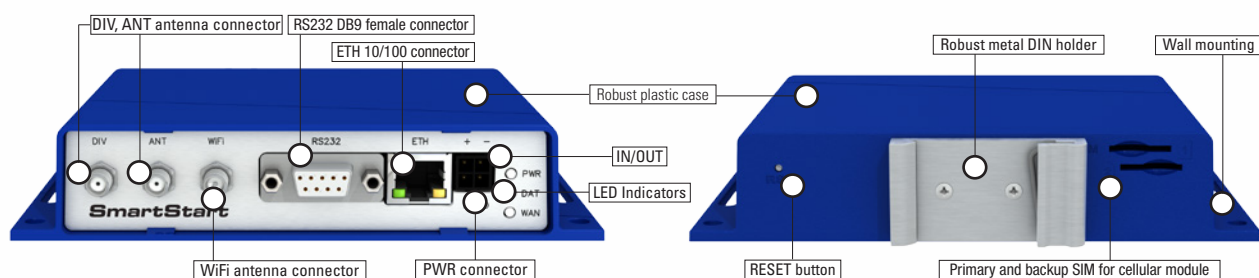


## Features

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: RAP, SMS, email, SNMP Trap, TCP (csv, xml, binary)
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	1x Digital Input On Voltage: 2.7V to 36VDC (4-Way Molex mini-fit connector)



**ADVANTECH**

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**SMARTWORX**

Partner:

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