






- + Powerful CPU and enhanced memory
- + Extended operational temperature range from -40 °C to +75 °C
- + 10-60 VDC operation with transient and reverse polarity voltage protection
- + Flexible port options – 3-port Switch, Ethernet and RS-232/422/485 serial ports with isolation
- + GPS and GLONASS support
- + MicroSD card holder
- + Low power consumption mode for solar and battery power applications
- + Optional industrial grade Wi-Fi
- + PoE PD, PoE PSE, In/Out, USB Host
- + Advanced security features

SmartFlex™ cellular router provides secure Internet connectivity for devices and LANs via the cellular networks. It can provide automatic wireless failover for wired networks, wireless connectivity for devices in remote locations where cable connections are impractical and wireless connectivity for mobile assets. With upload speeds of up to 50 Mbps and download speeds of up to 100 Mbps, SmartFlex provides ample bandwidth, even for applications that require video.

SmartFlex places intelligence at the network edge with an extremely powerful Cortex A8 CPU at 1GHz, 256 MB flash memory, 512 MB RAM and 128kB M-RAM, providing full support for LTE (Long Term Evolution) speeds and applications. A secure Web interface allows users to configure and manage SmartFlex from remote locations. The router can also upgrade its configuration and firmware from the operator's central server, allowing for simultaneous mass reconfiguration of every router on the network. Users may insert Linux scripts and can create multiple configurations for the same router and switch from one configuration to another at any time.

Modular SmartFlex can be configured for any application. Standard configuration includes 2 Ethernet ports with 2 independent LANs/IP addresses and also includes 1 USB host port, 1 microSD card holder, 2 SIM card holders for automatic failover to an alternate service provider, 2 binary inputs(I/O), 1 binary output (I/O) and onboard GPS.

An optional built-in Wi-Fi module is also available, with industrial grade operating temperature ranges from -40 to +75 °C (-20 to +60 °C LTE450 module). Further optional boards include: 3x ETH (the router can be configured with up to 5 total Ethernet ports and 3 independent LANs/IP addresses) or ETH/RS-232/485 or RS-232/485 (isolation strength up to 2.5kV) or RS-232. The SmartFlex supports real time data encryption and the creation of VPN tunnels using IPsec, OpenVPN and L2TP. It supports DHCP, NAT, NAT-T, DynDNS, NTP, VRRP, control by SMS, and numerous other functions, as well as additional software like SmartCluster VPN Server and R-SeeNet.

MODEL NO.	STANDARD PORT CONFIGURATIONS					OPTIONAL PORT CONFIGURATIONS				
	LTE ROUTER	GPS	2X ETHERNET (router port)	USB	I/O	RS232 RS485/422	RS232/485 ETHERNET	3X ETHERNET (switch)	WI-FI	POE
 SR30xxx0xx			✓	✓	✓			✓	✓	✓
 SR30xxx0xx	✓	✓	✓	✓	✓					✓
 SR30xxx1xx	✓	✓	✓	✓	✓			✓	✓	✓
 SR30xxx3xx	✓	✓	✓	✓	✓	✓			✓	✓
 SR30xxx4xx	✓	✓	✓	✓	✓		✓		✓	✓

Note: Antennas & Power Supply Sold Separately.

SmartFlex

FLEXIBLE, ADAPTABLE LTE ROUTER



ACCESSORIES

ORDER CODE	DESCRIPTION
BB-TG.30.8113	Antenna LTE, Terminal
BB-GA.110.101111	Antenna LTE, Magnet Mount
BB-AW-A2458G-FSRPK	Antenna Wi-Fi, 2.4 & 5.8 GHz
BB-RPS-v3-MO2-M	SmartFlex Power Supply, 12V/1A
BB-RPS-v3-PSE	SmartFlex Power Supply, 48V/1.35A (power cord required)
BB-PWRCORD-US	USA - Power Supply Power Cord
BB-PWRCORD-EU	EU - Power Supply Power Cord
BB-PWRCORD-UK	UK - Power Supply Power Cord
BB-PWRCORD-AUS	AU - Power Supply Power Cord
BB-SBD40	DIN Rail Clip - metal
BB-CPD3	DIN Rail Clip - plastic
BB-KN-v3-MO2-3	PS Cable 2-wire, MO 2 pins, 3m, v3 routers
BB-KIO-v3-MO6-3	IO Cable 6-wire, 3m, v3 routers

SPECIFICATIONS

CELLULAR MODULE PARAMETERS				
	SR303 - EMEA	SR305 - NAM	SR306 - APAC & LATAM	SR307 - LTE450
LTE	Bit rate 100 Mbps (DL) / 50 Mbps (UL) Supported frequencies: 800/900/1800/2100/2600 MHz	Bit rate 100 Mbps (DL) / 50 Mbps (UL) Supported frequencies: 700/700/850/AWS (1700/2100)/1900 MHz	Bit rate 100 Mbps (DL) / 50 Mbps (UL) Supported frequencies: 800/900/1800/2100/2600 MHz	Bit rate 100 Mbps (DL) / 50 Mbps (UL) Supported frequencies: 450/800/1800/2600 MHz
WCDMA	Bit rate 42.0 Mbps (DL) / 5.76 Mbps (UL) Supported frequencies: 900/1800/2100 MHz	Bit rate 42.0 Mbps (DL) / 5.76 Mbps (UL) Supported frequencies: 850/AWS (1700/2100)/1900 MHz	Bit rate 42.0 Mbps (DL) / 5.76 Mbps (UL) Supported frequencies: 850/900/1900/2100 MHz	Bit rate 42.0 Mbps (DL) / 5.76 Mbps (UL) Supported frequencies: 900/2100 MHz
GPRS/EDGE	Bit rate 237 kbps (DL) / 59.2 kbps (UL) Supported frequencies: 900/1800 MHz	Bit rate 236 kbps (DL) / 59.2 kbps (UL) Supported frequencies: 850/900/1800/1900 MHz	Bit rate 236 kbps (DL) / 59.2 kbps (UL) Supported frequencies: 850/900/1800/1900 MHz	Bit rate 236 kbps (DL) / 59.2 kbps (UL) Supported frequencies: 900/1800 MHz

SOFTWARE

Network and Routing	DHCP Server, DHCP Client, NAT/PAT, VRRP, Dynamic DNS client, DNS proxy, VLAN, QoS, NTP Client/ Server, IGMP, BGP, OSPF, RIP, SMTP, SMTPS, SNMP v1/ v2c/ v3, Backup routes, PPP, PPPoE, SSL, Port Forwarding, Host Port Routing, Ethernet Bridging
Security	HTTPS, SSH, VPN tunnels, SFTP, Firewall (IP Filtering, MAC address filtering, Inbound and outbound Port filtering)
VPN Tunnelling	Open VPN client and server and P2P, L2TP, PPTP, GRE, EasyVPN, DMVPN, 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 and USB 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 60 days
Log	System Log, Reboot Log, Kernel Log
Controlling and Diagnostic	SMS, SNMP v1/v2c/v3, Statuses, Log
Event Engine	StartUp script & Up/Down script (Bash), Digital Input, Network Parameters, Data Usage, Timer, Power, Device Temperature Report Types: RAP, SMS, email, SNMP Trap, TCP (csv, xml, binary)
Other	IPv6 support

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FLEXIBLE, ADAPTABLE LTE ROUTER



SPECIFICATIONS

PORTS, LED, ANTENNAS	
Up to 5x ETH ports	RJ45, 10/100 Mbps
SIM	2 Mini SIMs (2FF) (rear panel)
LED Indicators	PWR, DAT, WAN, ETH, SIM, USR, POE, IN0, IN1, OUT
3x ANT - ANT, DIV, GPS (sold separately)	SMA connectors
Wi-Fi Antenna (sold separately)	R-SMA connector
USB	USB Host connector 2.0
SD Card	1x Micro SD Card slot (rear panel)
RST	RESET button (rear panel)
*Optional 3-port SWITCH	3x RJ45, 10/100 Mbps
*Optional ETH - R232 - RS485	RJ45, 4-pin terminal block, 3-pin terminal block connectors – Isolation up to 2.5 kV
*Optional RS232 - RS485	5-pin terminal block, 4-pin terminal block connectors – Isolation up to 2.5 kV
*Optional RS232	RJ45

POWER	
Power Supply (sold separately)	10 – 60 VDC (2-Way Molex connector)
Power Consumption	Idle: 2.5 W Average: 4 W Peak: 11 W Sleep Mode: 10mW

ENVIRONMENTAL	
Temperature Range	Operating: -40 to +75 °C Storage: -40 to +85 °C
Temperature Range LTE450	Operating: -20 to +60 °C Storage: -40 to +85 °C
Humidity	Operating: 0 to 95 % Storage (Non-condensing): 0 to 95 %
Cold Start	-35 °C
Operating Altitude	2000 m / 70 kPa
Ingress Protection Rating	IP30

WI-FI - 802.11 A/B/G/N, AP OR CLIENT MODES	
Supported Wi-Fi band	2.4 GHz, 5.4 GHz
Encryption	None, WEP, TKIP, AES
5 GHz supported channels	36, 40, 44, 48, 52, 56, 60, 64, 149, 153, 157, 161, 165
2.4 GHz supported channels	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
Number of clients	10
Authentication	Open, Shared, WPA-PSK, WPA2-PSK

MECHANICAL	
Plastic or metal case with plastic or metal DIN rail	
Enclosure Dimensions	55x97x125 mm
Weight Plastic	170 g
Weight Metal	375 g

INDUSTRY CERTIFICATIONS & APPROVALS	
Radio for general LTE	ETSI EN 301 511 v9.0.2, ETSI EN 301 908-1 v5.2.1, ETSI EN 301 908-2 v5.2.1, ETSI EN 301 908-13 v5.2.1
Radio for LTE450	ETSI EN 301 908-1 v6.2.1, ETSI EN 301 908-13 v6.2.1, ETSI EN 301 489-24 v1.5.1
Emissions/Immunity	IEC 61000-6-2:2005, ETSI EN 301 489-1 v1.9.2, EN 55022:2010
Safety	EN 60950-1:06 ed.2 (not Hazardous Locations), EN 62311:2008
Vehicle	E8
Environmental	RoHS, RoHS2, REACH, WEEE

POE PARAMETERS	POE PD	POE PSE
Input voltage range	42.5 – 57 V	44 – 57 V, 65 W
Power available	25.50 W	2x 25.50 W (ETH0, ETH1)
Maximum current	600 mA	
Insul. Strength	1.5 kV from the router	none

Standards IEEE 802.3at-2009 (PoE+) and IEEE 802.3af-2003 (PoE) supported. Cabling needed is Category 5, up to 12.5 Ω. It is possible to use a passive PoE injector