SmartFlex FLEXIBLE, MODULAR LTE ROUTER





+ Powerful CPU and enhanced memory

- + Extended operational temperature range from -40 °C to +75 °C
- + 10-60 VDC operated with transient and reverse polarity voltage protection
- + Flexible Port options, such as 3-port Switch, Ethernet and S232/422/485 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

The SmartFlex[™] cellular router provides secure Internet connectivity for devices and LANs via the cellular networks. It can be used to 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 Mbit/s and download speeds of up to 100 Mbps, the SmartFlex provides ample bandwidth, even for applications that require video.

The 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 they can create multiple configurations for the same router. Users may switch from one configuration to another at any time.

The modular SmartFlex can be configured to suit any application. The standard configuration includes 2 Ethernet ports with 2 independent LANs/IP addresses. The standard configuration 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 (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.

		STANDARD PORT CONFIGURATIONS				OPTIONAL PORT CONFIGURATIONS					
MODEL NO.		LTE ROUTER	GPS	2X ETHERNET (router port)	USB	1/0	RS232 RS485/422	RS232/485 ETHERNET	3X ETHERNET (switch)	WI-FI	POE
Smartflee Bmartflee	SR30xxxx0xx	✓		✓	✓	✓			✓	✓	✓
Bmartifles :	SR30xxxx0xx	✓	✓	✓	✓	✓					✓
Smartfine :	SR30xxxx1xx	✓	✓	√	√	√			√	✓	✓
dimension of the second	SR30xxxx3xx	✓	✓	✓	✓	✓	✓			✓	✓
G G G G G G G G G G G G G G G G G G G	SR30xxxx4xx	✓	✓	√	√	√		√		✓	✓





FEATURES

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

RJ45, 10/100 Mbps
2 Mini SIMs (2FF) (rear panel)
PWR, DAT, WAN, ETH, SIM, USR, POE, INO, IN1, OUT
SMA connectors
R-SMA connector
USB Host connector 2.0
1x Micro SD Card slot (rear panel)
RESET button (rear panel)
3x RJ45, 10/100 Mbps
RJ45, 4-pin terminal block, 3-pin terminal block connectors – Isolation up to 2.5 kV
5-pin terminal block, 4-pin terminal block connectors – Isolation up to 2.5 kV
RJ45

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 12.5.0. It is possible to use a passive PoE injector				

SUPPORT AND WARRANTY

3 years warranty, Free device software upgrades, Optional warranty extension





SPECIFICATIONS

Cellular module parameters					
	SR303 - EMEA	SR305 - NAM	SR306 - APAC	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	

POWER	
Power Supply	10 - 60 VDC (2-Way Molex connector
Power Consumption	ldle: 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			

Open, Shared, WPA-PSK, WPA2-PSK

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			
MECHANICAL				

Plastic or metal case with plastic or metal DIN rail				
Enclosure Dimensions	87x30x127mm (150mm including wall month sides)			
Weight Plastic	170 g			
Weight Metal	375 g			

Authentication