SmartFlex SR300 FLEXIBLE, MODULAR LAN ROUTER





- + 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
- + MicroSD card holder, In/Out, USB Host
- + Low power consumption mode for solar and battery power applications
- + Optional industrial grade Wi-Fi
- + Optional PoE PSE or PoE PD on ETHO and ETH1
- + Advanced security features

The SmartFlex SR300 router provides secure Internet connectivity for devices and LANs via the WAN 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 100 Mbit/s and download speeds of up to 100 Mbps, the SmartFlex SR300 provides ample bandwidth, even for applications that require video.

The SmartFlex SR300 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 LAN speeds and applications. A secure Web interface allows users to configure and manage SmartFlex SR300 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 standard configuration includes 5 Ethernet ports with 3 independent LANs/ IP addresses. The standard configuration also includes 1 USB host port, 1 microSD card holder, 2 binary inputs(I/O) . An optional built-in Wi-Fi module is also available, with industrial grade operating temperature ranges from -40 to +75 °C.

The SmartFlex SR300 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, and numerous other functions, as well as additional software like SmartCluster VPN Server and R-SeeNet. other functions, as well as additional software like SmartCluster VPN Server and R-SeeNet.

SmartFlex Family

2x ETH, 1x USB, 2x BI, 1x BO, MicroSD reader, 2x SIM reader

BB - SR3 00 XXXXX - YYYY

3 OO X	XXXXX	- YYYY		
				No SmartWorx HUB
			SWH	SmartWorx HUB
			Accessories	
			0	No Accessories (DIN holder included)
			1	Accessories with EU power supply
			5	International Power Supply (EU, US, UK, AUS)
			Enclosure	
			1	Plastic enclosure
			2	Metal enclosure
			_	
			Interfaces	
			0	No optional port
			1	3x ETH Switch
			PoE	N- D-F
			0 8	No PoE PoE PSE
			9	PoE PD
			9	IOLID
			WiFi	
			0	No Wi
			1	WiFi (TI 2.4 & 5 GHz)
				(,
			Router version	
			00	Wired version

ORDERING INFORMATION

Note: Check with your local distributor for availability, options, and HW configuration. Contact Advantech B+B SmartWorx distributors.

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.

WebAccess/DMP

WebAccess/DMP takes management of your devices to new levels of flexibility and efficiency. Giving you a complete view of your installed device population, SmartWorx Hub delivers invaluable configuration, diagnostic and management facilities directly to your desktop, wherever you are.

Manage a single device or your entire device population at the same time. Whether you need to modify configuration parameters, download or upgrade installed firmware and applications or view detailed information regarding network statistics, you can do it all from any location.

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HW SPECIFICATIONS

PORTS, LED, ANTENNAS	
5x ETH ports	RJ45, 10/100 Mbps
LED Indicators	PWR, ETH, USR, POE, INO, IN1, OUT
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)

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	
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/	VI-FI - 802.11 A/B/G/N, AP OR CLIENT MODES *Optional	
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	

POE PARAMETERS	POE PD parameters for opposite PSE	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. Cal needed is Category 5, up to 12.5 Ω . It is possible to use a passive PoE injector		

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

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, 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), DMZ (via iptables)	
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	Management Automatic firmware update from server, Locally via LAN and USB, Over-the-Air software updates	
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	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: email, SNMP Trap	
Other	IPv6 support	



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STANDARDS AND REGULATIONS

INDUSTRY CE	NDUSTRY CERTIFICATIONS & APPROVALS	
	SR300 - EMEA	
Radio	ETSI EN 300 328 V2.1.1, ETSI EN 301 893 V2.1.1	
EMC	ETSI EN 301 489-1 V1.9.2, ETSI EN 301 489-1 V2.1.1, 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 C1D2 and ATEX: UL 60950-1, 2nd ed. + am1 + am2 * CAN/CSA C22.2 No. 60950-1-07, 2nd ed. + am1 + am2 * UL E486108 * ATEX II 3 G Ex nA IIC T4 Gc, DEMKO 16 ATEX 1801X *	

^{*} Excluding versions with PoE PSE.

ACCESSORIES

	ORDER CODE	DESCRIPTION
	BB-AW-A2458G-FSRPK	Antenna Wi-Fi, 2.4 & 5.8 GHz
	BB-RPS-v3-M02-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-KN-v3-M02-3	PS Cable 2-wire, MO 2 pins, 3m, v3 routers
	BB-KIO-v3-M06-3	IO Cable 6-wire, 3m, v3 routers



