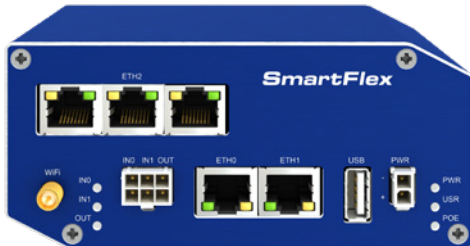


SmartFlex SR300

FLEXIBLE, MODULAR LAN ROUTER

ADVANTECH



- + 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 ETH0 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.

To streamline management and deployment of SmartFlex router family can be easily managed using a comprehensive cloud-based tool WebAccess/DMP.



SmartFlex Family
5x ETH, 1x USB, 2x DI, 1x DO, MicroSD reader

BB - SR300 XXXXX

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	
1	5x ETH
PoE	
0	No PoE
8	PoE PSE
9	PoE PD
WiFi	
1	WiFi (2.4 & 5 GHz)
Router version	
00	Wired version

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



WebAccess/DMP

WebAccess/DMP provides centralized management for your routers, allowing remote configuration and monitoring with customizable dashboards and alerts. It enhances security with two-factor authentication and PKI encryption. Complementing this, VPN Management simplifies network connectivity by automating VPN setup across diverse networks. Leveraging WireGuard VPN for its speed and security, it streamlines network management with features like zero-touch provisioning, flexible router grouping, and independent interface settings. This integrated solution enhances network security, simplifies operations, and empowers businesses with greater control and visibility over their network infrastructure.

SmartFlex SR300

FLEXIBLE, MODULAR LAN ROUTER



HW SPECIFICATIONS

PORTS, LED, ANTENNAS	
5x ETH ports	RJ45, 10/100 Mbps
LED Indicators	PWR, ETH, USR, POE, IN0, 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 supply range for PNs with PoE (BB-SR300x8xxx)	24 – 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/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. Cabling 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	
Operating System	ICR-OS (Linux based)
SW Customization	Router App
Application Development	Linux based router SDK, *Python, BASH, C/C++, *Node-RED, *Docker
Networking Features and Protocols	Static Routes, DHCP, NAT/PAT, SSH, VRRP, PPPoE, SNMP, SMTP, Dynamic DNS client, DNS proxy, VLAN, QoS, *DMVPN, NTP Client/Server, *Routing protocols RIP, BGP, OSPF, IS-IS, NHRP, Backup Routes, Port Forwarding, Host Port Routing, Ethernet Bridging, Load Balancing, IPv6 Dual Stack
Industrial Protocols and IoT	*Modbus RTU/TCP gateway, *IEC 60870-5-101 to 104 gateway, *DF1, *DNP3, *MQTT, *LWM2M
Security	HTTPS, SSH, SFTP, DMZ, Firewall (IP Filtering, MAC address filtering, Inbound and outbound Port filtering) VPN Tunneling – WireGuard, OpenVPN, IPsec with IKEv1 and IKEv2, GRE, L2TP, PPTP Authentication – RADIUS, TACACS+, 2FA, *SCEP Encryption – DES, 3DES, AES, RSA up to 4096, Ed25519, MD5, SHA
Firmware Management	Automatic firmware updates – server, locally via LAN or remotely via WAN Over-the-Air cellular module firmware updates
Diagnostic/Log	Status – Signal Strength, Data Usage, Detailed Long Term Statistics One CLICK report – Current Configuration, Factory Identification, Routing Table Log – System Log, Reboot Log, Kernel Log Remote Diagnostics (via SSH)
Event Engine	StartUp script & Up/Down script (Own rules based on Digital Inputs, Network Parameters, Data Usage, Timer, Power, Device Temperature) Report Types: SMS, email, SNMP Trap
Configuration	Web server, SSH, Four configuration switchable profiles, Automatic configuration update from server, Backup & Restore configuration
Advanced Software Tools	WebAccess/DMP – Remote Device Provisioning, Monitoring & Management Platform

*Functionality is available with installed Router App

SmartFlex SR300

FLEXIBLE, MODULAR LAN ROUTER



STANDARDS AND REGULATIONS

INDUSTRY CERTIFICATIONS & APPROVALS	
Radio	ETSI EN 300 328, ETSI EN 301 893
EMC	ETSI EN 301 489-1, ETSI EN 301 489-1, ETSI EN 301 489-17
Safety	IEC 62368-1 (UL E487720), EN 62311)
Cybersecurity	EN 18031-1
National	CE, UKCA compliant, FCC

ACCESSORIES

PART NUMBER	DESCRIPTION	INCLUDED	INCLUDED	INCLUDED	SOLD SEPARATELY
		IN PACKAGE	IN PACKAGE	IN PACKAGE	
		BB-SR300xxxx5	BB-SR300xxxx1	BB-SR300xxxx0	
OPT1-ANT-WFT-06	Antenna Wi-Fi, 2.4 GHz / 5 GHz/ 6 GHz	✓ BB-SR3001xxx5	✓ BB-SR3001xxx1		✓
BB-RPS-v3-M02-M	SmartFlex Power Supply, 12V/1A, EU,US,UK,AU	✓			✓
BB-RPS-v3-M02-EU	SmartFlex Power Supply, 12V/1A, EU plug		✓		✓
BB-RPS-v3-PSE	SmartFlex Power Supply, 48V/1.35A (power cord required)				✓
BB-PWRCORD-US	US Power Supply Power Cord				✓
BB-PWRCORD-EU	EU Power Supply Power Cord				✓
BB-PWRCORD-UK	UK Power Supply Power Cord				✓
BB-PWRCORD-AU	AU Power Supply Power Cord				✓
BB-SBD40	DIN Rail Clip - metal	✓ BB-SR300xxx2x	✓ BB-SR300xxx2x	✓ BB-SR300xxx20	✓
BB-KN-v3-M02-3	PS Cable 2-wire, M0 2 pins, 3m, v3 routers			✓	✓
BB-KIO-v3-M06-3	IO Cable 6-wire, 3m, v3 routers		✓		✓
BB-KD-ETH	Ethernet cross cable	✓			✓

