

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, 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
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.

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, 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 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	
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), 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	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, Statues, 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 CERTIFICATIONS & APPROVALS	
	SR300 - EMEA
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 UL C1D2 UL E486108 *
National	CE, UKCA compliant

* 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

