SmartFlex

Flexible, Modular LTE Router

Features

- Powerful CPU and enhanced memory
- Extended operational temperature range from -40 °C to +75 °C
- 10 ~ 60 V_{DC} 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

Introduction

The SmartFlex™ cellular router provides secure Internet connectivity for devices and LANs via 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, SmartFlex provides ample bandwidth, even for applications that require video.

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 tunneling	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 configurationupdate 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

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 (no for LTE450 model)	SMA connectors
Wi-Fi Antenna-*optional	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

Specifications

Power

Power Supply	10 ~ 60 V_{DC} (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
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

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
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	87 x 30 x 127 mm (3.43 x 1.18 x 5) (150 mm including wall month sides)
Weight Plastic	170 g
Weight Metal	375 g

Ordering Information

ADVANTECH **Industrial Ethernet Solutions**