Sagemcom

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# Sagemcom F@st 3896

## Wi-Fi 6 triple-play home gateway



Sagemcom F@st 3896 is a broadband gateway providing multi-gigabit broadband Internet access through DOCSIS 3.1 and 3.0 cable networks. With Sagemcom F@st 3896 and the associated set-top-boxes, the user gets access to 3-play services with a high level of quality:

- Up to 5Gbps Downlink and 2 Gbps Uplink throughput over DOCSIS
- Dual band dual concurrent Wi-Fi 6 Access Point in 2.4 and 5 GHz bands
- High quality Voice over IP communication based on the MGCP protocol as well as on SIP (option)
- Content sharing with embedded DLNA Server (option) and USB host 3.0 port (option)

Sagemcom F@st 3896 software is available in two versions either in-house field proven Sagemcom SWAN™ solution either RDK-B well-known solution defined by cable industry for broadband gateways..

### SEAMLESS MULTI DEVICE CONNECTION

With Sagemcom F@st 3896, end user can connect all its IT network devices (mobile phones, tablets, computers, printers, gaming devices, fixed or DECT phones, ...) easily and simultaneously over all the available interfaces: Wi-Fi 6, 2.5 Gigabit Ethernet, Multi-Gigabit Ethernet, USB host 3.0, FXS. The F@st 3896 also optionally includes an integrated bonded MoCA 2.0 interface which enables the gateway to provide connectivity to STB and client devices connected within the home.

### TOP CLASS WIRELESS INTERFACE

Sagemcom F@st 3896 offers a superfast "dual band dual concurrent" and reliable wireless LAN connection. It includes high efficient Wi-Fi 6 interfaces on both bands: 4x4 11ax for 5GHz, 3x3: 3x3 or 4x4 11ax for 2.4GHz with advanced multi-user wireless technology. Thanks to its easy install program, a home network without in house cabling can be easily built. Sagemcom F@st 3896 also features the latest WPA3 security mechanism while being compatible with WPA/WPA2 older scheme. In addition, in order to facilitate the configuration it offers the automatic radio channel selection and WPS for security key exchange.

### RICH VOICE CONTENT

Sagemcom F@st 3896 integrates a scalable, field proven solution of Wi-Fi community, with options at several levels:

- Traffic isolation: L2TP and GRE tunnels
- QoS: Minimum guaranteed bandwidth for Home user
- Priority on traffic (Home user: higher priority)
- Wi-Fi: Maximum number of connected Hotspot Users

### FULLY FEATURED IP ROUTER

Sagemcom F@st 3896 supports the most up-to-date IP services applicable to residential gateway. It enables IPV6 network either in Dual Stack mode or in DS Lite mode.

### EFFICIENT FIREWALL

Sagemcom F@st 3896 integrates the most up-to-date firewall tools:

- Stateful Packet Inspection
- Complete address/port/protocol filtering
- VPN pass through: PPTP or IPsec

### REMOTE MANAGEMENT: TR-069 AND SNMP AGENTS

Sagemcom F@st 3896 offers a robust SNMP Agent ensuring full remote service provisioning and resilient upgrade. The home gateway also offers a field proven TR-069 agent.

### MULTI-PLAY QUALITY OF SERVICE

Sagemcom F@st 3896 associates comprehensive QoS techniques for double and triple architectures achieving a complete management of the QoS with the guaranty to use simultaneous services with a good level of performance. Dedicated CPU cores for Networking & Voice and for Multimedia Applications enable to guarantee high performance.

### SWAN™, A RICH AND AGILE MIDDLEWARE

With in-house SWAN™ middleware version, Sagemcom F@st 3896 benefits from a software solution largely deployed on the field. It does natively support IPv6. The fully featured dual stack IP v4/v6 of SWAN™ middleware ensures to the F@st 3896 its readiness for all major scenario of IPv6 network migration. SWAN™ modular architecture allows easy third parties application integration for operator to easily differentiate: GUI, Web services or even new features developped over SWAN™ SDK.

### WHOLE HOME WI-FI AGENT INTEGRATED

Sagemcom F@st 3896 embeds Sagemcom Whole Home Wi-Fi agent ensuring the following services:

- 802.11k/v support
- Bandsteering 2.4 GHz / 5 GHz
- Wi-Fi performances reporting to cloud
- Troubleshooting report

| VARIANTS | F@st 3896 4x4 | F@st 3896 3x3 | F@st 3896UM 4x4 |
|---|---|---|---|
| LAN | 1 x 2.5GEth port | 4 x 1GEth ports | 1 X 2.5GEth port |
| | 3 x 1GEth ports | | 3 x 1GEth ports<br>1 x Moca 2.0 port |
| WLAN | 802.11ax | 802.11ax | 802.11ax |
| | @ 2.4GHz 4x4<br>@ 5GHz 4x4 | @ 2.4GHz 3x3<br>@ 5GHz 4x4 | @2.4GHz 4x4<br>@5GHz 4X4 |

## Technical features

### INTERFACES

- Network:
  - DOCSIS 3.1 2x2
  - DOCSIS 3.0 with channel bonding up to 32x8
  - Switchable diplexer 85MHz / 204MHz (option)
  - Backward compatible with DOCSIS 1.0/2.0 and 2.0b
  - Compatible with EuroDOCSIS and US DOCSIS frequencies
- User:
  - Wi-Fi: Wi-Fi 6 access point in 2.4 GH and 5 GHz (see detail in configuration table)
  - Ethernet:
    Eth 100/1000/2500 Base-T
    Eth 10/100/1000 Base-T
  - MoCA (optional)
    - Bonded MoCA 2.0
    - Full backward compatibility to MoCA 1.1 ; Support for up to 16 MoCA network nodes ; Throughput up to 800 Mbps
    - Expanded range of operating frequencies – 1150 MHz to 1650 MHz
    - Supports both parameterized and prioritized QoS
  - 1 USB host 3.0 for Accessories (option)
  - 2 FXS (option)

### WIRELESS SECURITY

- WPA3/WPA2/WPA
- WPS
- Wi-Fi Alliance certified

### IP FONCTIONS

- General:
  - NAT/PAT
  - DHCP client and server
  - DNS relay
- IPv6:
  - Dual stack
  - DSLite
- Routing:
  - Static/dynamic routing
- IGMP Proxy/snooping
- Firewall:
  - Address, port and protocol filtering
  - State full Packets Inspection
- Quality of service: DiffServ
- L2TP

### VOICE OVER IP (VOIP)

- Multi FxS management, up-to 2 VOIP lines
- Protocol NCS, MGCP or SIP (PacketCable 1.5 and PacketCable 2.0 supported)
- Voice coding:
  - G711 (64 kbps)
  - G729 (8 kbps)

### REMOTE MANAGEMENT

- Firmware upgrade by TFTP or HTTP
- Auto provisioning and remote configuration
- SNMP
- TR-069
- Advanced voice supplementary services

### ELECTRICITY SAFETY

- Compliant with EN 60 950, EN 41003

### ENVIRONMENT

- Operating temperature: 5°C to 40 °C
- EMC: 89/336EEC, EN 55022 Class B, EN 55024
- Support IEEE 11b/g/n/ax main features (2.4 GHz)
- Support IEEE 11a/n/ac/ax main features (5 GHz)
- CE

### PHYSICAL FEATURES

- External Power supply
- Size (L x D x H in mm): 190 x 65 x 222 to 235 (with foot)
- Weight (g): 950g

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