

Sagemcom F@ST 5657

The F@ST5657 digital splitter is an optical network termination unit (ONT Optical Network Terminal) that can be used in a GPON Gigabit-capable Passive Optical Network (according to ITU Recommendation G.984.1).

The Sagemcom F@ST 5657 has 4Gigabit Ethernet (GE) interface (LAN1-4), 1 USBports, 1 telephones and provides access to 2.4 and 5 GHz AC WiFi networks. It provides a very good wireless connectivity. The adapter port of the Sagemcom F@ST5657 is SC/APC. Also there is an USB port that can be used as an external hard drive and easy access personal files.



ONT Details		
CPE manufacturer/model	Sagemcom / F@st 5655v2 AC RF	
Product Overview		
WAN	PON port with SC/APC Optical module connector	
LAN	4xGb Ethernet	
POTS	2xPOTS ports RJ11	
Wireless Wi-Fi	WLAN 802.11 b/g/n/ac	
USB	1 port USB 2.0	
CPE Hardware		Description
CPU	BCM 68380	
Switch Chipset	Integrated in BCM 68380	
WiFi Chipset	2.4GHz	BCM43217
WiFi Chipset	5 GHz	BCM43602
SLIC	LE9540	
NAND Flash	128MB	
DDR2	DDR3 256MB	
Port/Button		Function
ON/OFF	Indicates the power button. It is used to power on or power off the device.	
POWER	Indicates the power port, used to connect to the power adapter or backup battery unit.	
USB	Indicates USB host port, used to connect to USB storage devices.	
TEL1–TEL2	Indicates VoIP telephone ports (RJ-11), used to connecting to the ports on telephone sets.	
LAN1–LAN4	Indicates auto-sensing 10/100/1000M Base-T Ethernet ports (RJ-45), used to connect to PCs or IP set-top boxes (STBs).	
Reset	Indicates the reset button. Press the button for a short time to reset the device; press the button for a long time (longer than 10s) to restore the device to the default settings and reset the device.	
WLAN	Indicates the WLAN button, used to enable or disable the WLAN function.	
WPS	Indicates the WLAN protected setup.	

LED	Description	Status	Description
Power	Power supply LED	Off	Power Box is off.
		Flashing Green	Power box booting - 1Hz (50% on 50% off)
		Solid Green	Power Box is ready to use.
		Flashing Amber	Upgrade ongoing - 1Hz (50% on 50% off)
Internet	Internet LED	Off	There is no Internet connection.
		Solid Green	The digital hub is connected to the Internet.
		Flashing Green	Traffic between LAN and WAN - 2Hz (50% on 50% off)
LAN	LAN port LED	Off	There is no device connected to LAN port
		Solid Green	There is a device connected to LAN port
		Flashing Green	The device connected to LAN port is exchanging data - 2Hz (50% on 50% off)
Phone	Voice telephone port LED	Off	One account: The account is disabled
			Two accounts: both accounts are disabled
		Solid Green	One account: The SIP account is registered, able to make and receive calls.
			Two accounts: Both SIP accounts are registered, able to make and receive calls.
		Flashing Green	One or two account: Call ongoing - 2Hz (50% on 50% off)
		Solid Amber	One account: N/A
			Two accounts: one of the 2 accounts gets a wrong authentication
		Solid Red	One account: Wrong authentication
Wifi	WLAN LED	Off	The wireless interface is disabled.
		Solid Green	The Wireless interface is activated.
		Flashing Green	The Wireless interface is receiving or transmitting data. - 2Hz (50% on 50% off)
WPS	WPS LED	Off	Default status - WPS window is closed
		Flashing Green	The WPS pairing is ongoing - 2Hz (50% on 50% off)
		Solid Green	WPS pairing succesfull (the LED turns off after 10 secs)

Section	Item	Description
GPON Uplink		The GPON system is a single-fiber bidirectional system. It uses wavelengths 1310 nm in TDMA mode in the upstream direction and wavelengths 1490 nm in broadcast mode in the downstream direction.
		The maximum downstream rate at the GPON physical layer is 2.488 Gbit/s.
		The maximum upstream rate at the GPON physical layer is 1.244 Gbit/s.
		Supports a maximum logical distance of 60 km and a physical distance of 20 km between the remotest ONT and nearest ONT, which are defined in ITU-T G.984.1.
		Supports a maximum of eight T-CONTs. Supports T-CONT types Type1 to Type5. One T-CONT supports multiple GEM ports (maximum of 32 GEM ports are supported).
		Supports three authentication modes: by SN, by password, and by SN+password.
		Upstream throughput: the throughput is 1G for 64-byte packets or other types of packets in RC4.0 version.
		Downstream throughput: The throughput of any packets is 1 Gbit/s.
		If the traffic does not exceed 90% of the system throughput, the transmission delay in the upstream direction (from UNI to SNI) is less than 1.5 ms (for Ethernet packets of 64 to 1518 bytes), and that in the downstream direction (from SNI to UNI) is less than 1 ms (for Ethernet packets of any length).
LAN	4xGb Ethernet	Four auto-sensing 10/100/1000 Base-T Ethernet ports (RJ-45): LAN1-LAN4
	Ethernet Features	Auto-negotiation of rate and duplex mode
		MDI/MDI-X auto-sensing
	Route Features	Ethernet frame of up to 2000 bytes
		Up to 1024 local switch MAC entries
		MAC forwarding
	Configuration	Static route, NAT, NAPT, and extended ALG
		DHCP server/client
PPPoE client		
The LAN1 and LAN2 ports are mapped to the Internet WAN Connection.		
	The LAN3 and LAN4 ports are mapped to the IPTV WAN Connection.	
	VLAN #1 mapped to LAN1, LAN2 and WiFi are in Routed for Internet with default IP 192.168.1.1 and DHCP class 192.168.1.0/24	
	VLAN #2 mapped to LAN2 and LAN4 are in Bridged for IPTV	

Multicast Specification	IGMP version	v1,v2,v3
	IGMP snooping	Yes
	IGMP proxy	no
	Multicast groups	Up to 255 multicast groups at the same time
POTS	Two VoIP telephone ports (RJ-11): TEL1, TEL2	G.711A/u, G.729 and T.38
		Real-time Transport Protocol (RTP)/RTP Control Protocol (RTCP) (RFC 3550)
		Session Initiation Protocol (SIP)
		Dual-tone multi-frequency (DTMF) detection
		Frequency shift keying (FSK) sending
		Two phone users to call at the same time
	Client Parameter example to be supported	<p>The device MUST use a SIP URI structured: <SIP-ID>@<SIP-Proxy FQDN> = +CC_AC_SNB@as1.romtelecom.net</p> <p>Authentication REGISTER example: <Info>REGISTER sip:as1.romtelecom.net SIP/2.0 From: <sip/tel:+40214999730@as1.romtelecom.net>;tag=as0c395baa To: <sip:+40214999730@as1.romtelecom.net> Authorization:Digestusername="+40214999730@as1.romtelecom.net", realm="as1.romtelecom.net",nonce="4b0F+BpSoE4SX827prYWCQ==", uri="sip:as1.romtelecom.net",response="a9a1fe821a3224749fa2a4e745751b7c" (1 TR 114, RFC2616, RFC3261, RFC3325, RFC 3966 support TEL-URI, ETSI TS 183 007)</p>
Configuration	The FXS ports is mapped to the VoIP WAN Connection	
Wireless LAN	WLAN	IEEE 802.11b/802.11g/802.11n/802.11ac
	WiFi Bands	5GHz (20/40/80 MHz) and 2.4GHz (20/40 MHz)
	Authentication	WiFi protected access (WPA) andWPA2
	SSIDs	Multiple service set identifiers (SSIDs)
	Enable by default	Yes
	SSID 1 Private	SSID: Telekom-XXXXXX (XXXXXX = per device unique value with at least 6 randomly chosen characters)
		Encryption: WPA2 and the CCMP protocol (the key must have a length of 8 characters, consisting of uppercase and lowercase letters, numbers).
Auto-channel selection		
Configuration	The SSIDs is mapped to the Internet WAN Connection	

USB		Complying with the USB 2.0
Physical Dimension	ONT dimension	247mm*171mm*43mm
	Weight	<500g
Power Supply		Power adapter input: 100 V AC to 240 V AC, 50 Hz to 60 Hz
		System power supply: 11 V DC to 13 V DC, 2 A
		Static Power Consumption:7.5W
		Average Power Consumption:10W
		Maximum Power Consumption:18W
Ambient	Operation Temperature	0~45 C degrees
	Storage Temperature	-10~60°C

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		Flashing Amber	Upgrade ongoing - 1Hz (50% on 50% off)
Internet	Internet LED	Off	There is no Internet connection.
		Solid Green	The RGW received an IP address
		Flashing Green	Traffic between LAN and WAN - 2Hz (50% on 50% off)
LAN	LAN port LED	Off	There is no device connected to LAN port
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