

# Smart Dupline® Universal Mobile Modem Type SH2UMMF124

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- Universal modem extension for Sx2WEB24
- Connection to Sx2WEB24 via internal bus
- Compatibility with quad-band GSM-GPRS-EDGE standards
- Compatibility with dual-band UMTS-GPRS-HSPA standards
- SIM (25 x 15mm) for data communication (M2M SIM type only)
- Available versions: one for Europe
- Dimensions: 2-DIN module
- Protection degree (front): IP40

## Product Description

The SH2UMMF124 is a universal mobile modem which, connected to a Sx2WEB24, enables the control and monitoring of the smart house functions/ events, sending and receiving SMS messages to/from mobile phones. The SMS functions are programmed by the SH tool. Using SMS messaging the user can:

- activate/deactivate functions
- read function status
- write analogue values (set-points, timers)

- read analogue values (set-points, timers, analogue inputs such as temperature sensors, lux sensors...)
- receive events (alarms, function status changes, analogue signal crossing set-points,...).
- receive feedback on the sent commands.

Furthermore the SH2UMMF124 is based on UMM communication technology for data communication when wired internet is not available.

## Ordering Key

**SH 2 UMM F124**

smart-house \_\_\_\_\_  
 2-DIN housing \_\_\_\_\_  
 Universal modem \_\_\_\_\_  
 Area \_\_\_\_\_  
 Power supply \_\_\_\_\_

## Type Selection

Housing	Mounting	Compatibility Area	Supply: 15 to 30 VDC
2 DIN	DIN-rail	Europe	SH2UMMF124

## Supply Specifications

<b>Power supply</b>	Overvoltage cat. II (IEC 60664-1, par. 4.3.3.2)	<b>Rated operational power</b>	5 W
Rated operational voltage	15 to 24 VDC ± 20%	<b>Protection for reverse polarity</b>	Yes
<b>Operational voltage range</b>	15 to 30 VDC (ripple included)	<b>Connection</b>	A1 (+) and A2 (-)
<b>Rated impulse voltage</b>	500V (1,2/50µs) (IEC 60664-1, tab. F.1)	<b>Power on delay</b>	Typ. 4 s
		<b>Power off delay</b>	1 s

## Main hardware characteristics

<b>Radio modem</b> Communication technology	GSM, GPRS, EDGE standards Quad band: 850 MHz, 900 MHz, 1800 MHz, 1900 MHz. UMTS and HSPA standards Dual band: Europe (EUD): 900 MHz, 2100 MHz; Class 4 (2 W, 33 dBm) @ GSM 850/900 MHz Class 1 (1 W, 30 dBm) @ GSM 1800/1900 MHz Class E2 (0.5 W, 27 dBm) @ EDGE 850/900 MHz Class E2 (0.4 W, 26 dBm) @ EDGE 1800/1900 MHz Class 3 (0.25 W, 24 dBm) @ UMTS	<b>Communication Purpose</b>	Access to the Sx2WEB24 if wired network is not available to send SMS
Output power		<b>UMTS-HSPA connectivity</b> Downlink speed Uplink speed W-CDMA (Wideband Code Division Multiple Access)	HSDPA 7.2Mb/s (category 8) HSUPA 5.76Mb/s (category 6) Downlink/Uplink up to 384 kb/s
		<b>GPRS-EDGE connectivity</b> Multi-slot Mobile-station Downlink speed  Uplink speed  CSD (Circuit Switch Data)	12 class B class GPRS: up to 107 kb/s EDGE: up to 296 kb/s GPRS: up to 85.6 kb/s EDGE: up to 236.8 kb/s Downlink/Uplink: up to 14.4 kb/s
<b>Modem Configuration</b>	By means of the SH tool: - Access Point Name (APN) - connection number	<b>Auxiliary port</b> Type and connections	Compatible with Sx2WEB24 unit only
<b>SIM</b> Type	SIM (25 x 15mm) for data communication (M2M SIM type only)	<b>LED's indication</b> Power LED GSM LED	1 green 1 blue
Holder	On the front with protection cover		

## General Specifications

<b>Over voltage category</b>	Cat. III (IEC 60664, EN60664)	<b>CE Marking</b>	Yes
<b>Dielectric strength</b>	4000 VAC RMS for 1 min.	<b>EMC</b>	
<b>Noise rejection</b> CMRR	65 dB, 45 to 65 Hz	Immunity - Electrostatic discharges  - Immunity to irradiated Electromagnetic fields  - Immunity to Burst  - Immunity to conducted disturbances  - Surge	According to EN61000-6-2 EN61000-4-2: 8 kV air discharge, 4 kV contact;  EN61000-4-3: 10 V/m from 80 to 3000 MHz; EN61000-4-4: 4 kV on power lines, 2kV on single lines;  EN61000-4-6: 10 V from 150 KHz to 80 MHz; EN61000-4-5: 500 V on power supply According to EN61000-6-3 According to CISPR 22
<b>Environment</b> Protection degree Front Screw terminals Operating temperature Storage temperature	IP40 IP20 -20° to +50° (-4° to 122 °F) -30 to +70°C (-22°F to 158°F) (R.H. < 90% non-condensing @ 40°C)	<b>Standard compliance</b>	
<b>Connection</b> Antenna Power supply	RP-SMA female 2 screw terminals 1.5 mm <sup>2</sup> max Min./Max. screws tightening torque: 0.4 Nm / 0.8 Nm	Safety  Health and Safety EMC RF spectrum efficiency	IEC60664, IEC61010-1 EN60664, EN61010-1 EN 60950 EN301489-1, EN301 489-1-7 EN301511
<b>Housing</b> Dimensions (WxHxD) Material	38.8 x 90 x 63.18 mm Noryl, self-extinguishing: UL 94 V-0	<b>Accessories</b>	The SH2UMMF124 is delivered together with an antenna with RP-SMA connector to be screwed directly on the unit.
<b>Mounting</b>	DIN-rail		
<b>Weight</b>	Approx. 100 g (packing included)		
<b>Approvals</b>	cULus according to UL60950 <b>UL notes:</b> Max room temperature: 40°C		

## Mode of Operation

The SH2UMMF124 module must be connected to the Sx2WEB24 via the internal bus and it must be located only on the left side of the Sx2WEB24. All the functions and setup

(phone numbers) are programmed using the SH tool. The SIM card is not included.

## LEDs Indication

**Green LED:** Power status.  
 ON: Supply ON  
 OFF: Supply OFF

**Blue LED:** Communication  
 - OFF: the unit is OFF.  
 - Fast blinking: net search /

not registered / turning off.  
 - Slow blinking: registered full service.  
 - ON: a call is active.

## Dimensions (mm)

