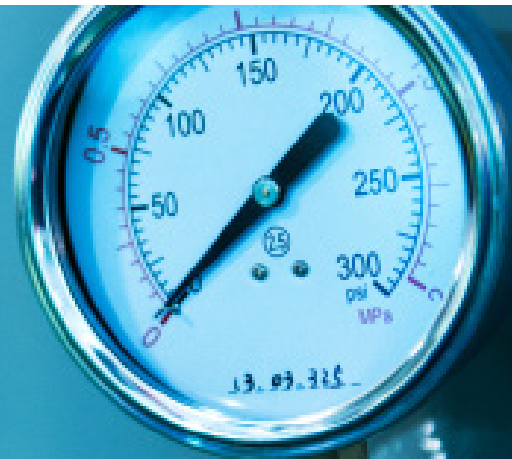


# M110 SERIES



## Intelligent industrial modem

Maestro M110 modems are designed to provide connectivity across a broad range of M2M and IoT applications. They allow Internet connectivity via serial port to PLCs, Meters, Vending Machines. They help transporting data from any industrial device to data control servers, allowing businesses to benefit from real-time data monitoring, management and control.

Available in NB-IoT and LTE-M1

mPack Software Suite  
with Workbench configuration tool

Last Gasp  
(factory option)

Two 2- or 3-way versatile I/Os



Smart  
Metering



POS &  
Kiosks



Oil & Gas  
Monitoring



Vending  
Machines

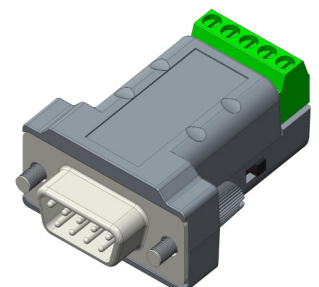


Industrial  
Automation

## SNAP CAP™

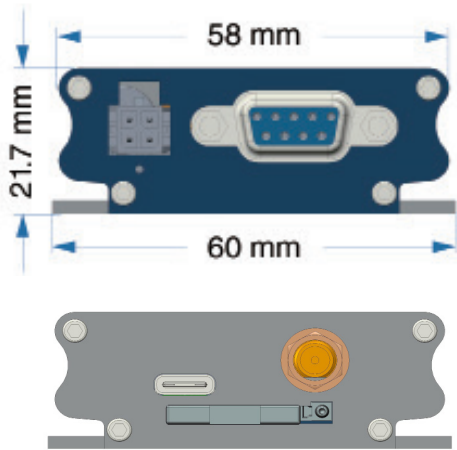
Snappily converts M110 series' RS-232 port on a 9-pin sub-D connector into an *isolated*, half- or full-duplex (user-selectable via a slide switch) RS-485 port on a 5-pin, 3.5 mm pitch, COMBICON connector.

\* i.e with integrated transformer, thus allowing for 1.5 km-long cabling



D2SPHERE™ device management services let you monitor, diagnose, control and update your Maestro and FALCOM devices. Information such as signal strength, geographic location, battery state, temperature, device firmware and software versions can be remotely monitored, stored and presented to help you maintain connectivity, manage quality of service and prevent downtime.

# M110 Series specifications



## SOFTWARE (mPack software suite)

- Connectivity**
  - Dial-up
  - TCP / UDP permanent client / server or on-demand client with two TCP / UDP sockets for failover,
  - Network connectivity watchdog
- Miscellaneous features**
  - Support for concatenated SMS
  - Conversion between Modbus RTU and Modbus TCP
  - Configurable text and recipients upon Last Gasp
- DoTA** via user's HTTP server or D2SPHERE™
- Configuration** via Workbench through RS-232 or, when available, USB; also via SMS, Telnet or D2SPHERE™

\* i.e. user-configurable, each one independently from the other, as (i) analogue input; or (ii) digital output (2-way); or (iii) analogue input suited to the so-called 'current loop' sensors - aka 4 mA ~ 20 mA sensors (3-way)

## HARDWARE

- Casing** Extruded Aluminium
- Dimensions** 60 x 60 x 21.7 mm
- Weight** Approximately 80 g
- Operating temperature range**
  - Class A: -30°C ~ +70°C
  - Class B: -40°C ~ +85°C
- Memory**
  - Flash memory [executable]: 256 KB standard; 1 MB upon request
  - RAM: 128 KB

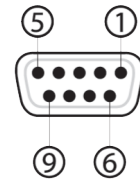
## POWER

- Main Source** 8 VDC ~ 32 VDC w/ Slow Start and absorption of 2G current bursts
- Last Gasp (factory option)** Approximately 20-second-long via two industrial-grade super caps

## INTERFACES

**RS-232** on a 9-pin sub-D connector

- DCD
- Rx
- Tx
- DTR
- Ground
- DSR
- RTS
- CTS
- RI



**USB** on a Type-C connector (M113 and M115 only)

**I/Os** Two versatile\* I/Os, either 2-way (M111 and M112) or 3-way (M113 and M115 only)

**Cellular antenna** External on an SMA connector

**SIM interface** 2FF SIM 1.8 V / 3.0 V

**LEDs** Two

MODEL NAME	TERRITORIES OR OPERATOR(s)	CELLULAR TYPE	BAND(s)	FALL BACK MODE	BANDS	GNSS	PLANNED CERTIFICATIONS	FCS (*)	ORDER CODE
M111	EMEA, [most of] Asia Pacific	2G	3/8				RED, GCF		M111#02
	World excluding Japan, Korea		2/3/5/8				TBD		M111
M112	EMEA	NB-IoT	8	*	N/A	x	TBD		M112#8
			20				TBD		M112#K
	8/20		TBD				M112#8K		
	5		TBD				M112#5		
M113	Asia Pacific	LTE-M1	28				TBD		M112#S
	Verizon Wireless		13				FCC (**), Verizon Wireless		M113#D
	AT&T Wireless, T-Mobile USA, Sprint		2/4/5/12				FCC (**), PTCRB, AT&T Wireless		M113#245C
M115	World	LTE-M1 NB-IoT	2/3/4/5/8/12/13/20/28				TBD	Q1 '18	M113
	EMEA, [most of] Asia Pacific	3G	1/8				2G	3/8	TBD
	World			1/2/5/8				TBD	

Please consult us regarding the models shown in grey which are subject to MOQ and other considerations

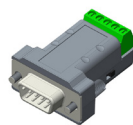
Uplink / Downlink maximum data rates – 3G: 5.76 / 7.2 Mbps;  
NB-IoT: 62.5 / 27.2 kbps; LTE-M1: 375 / 375 kbps

\* First customer shipment  
\*\* Also Class I Division 2 for use in explosive atmospheres

## ACCESSORIES



Power adapters



SNAP CAP™



USB cable



Antennas



DIN Rail clip

M&F Technologies Limited  
9<sup>th</sup> Floor, Wing Cheong Factory Building  
121 King Lam Street, Cheung Sha Wan  
Kowloon, Hong Kong

Hong Kong, Shenzhen, Mumbai, Langewiesen, Mataró, Beaverton

Tel.: +852 3955 0222  
Fax: +852 3568 4833  
www.maestro-wireless.com  
contact@maestro-wireless.com

We reserve the right at any time and without prior notice to modify or improve the devices and the services offered; the same applies to accessories which could also be discontinued. 7 Sep 2017