M110 Series

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

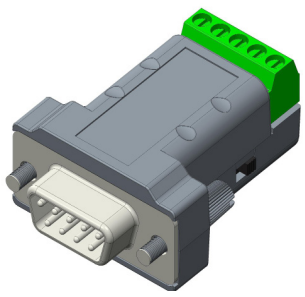
Vending Machines

Industrial Automation

SNAP CAP™

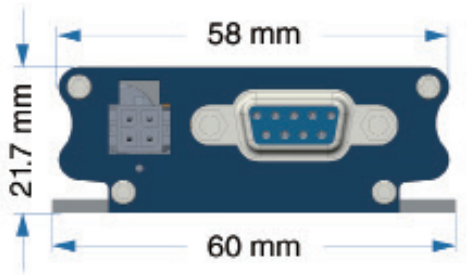
Snappily converts M110 series' RS-232 port on a 9-pin sub-D connector into an *isolated**, half- or full-duplex (user-selectable via a slide switch) RS-485 port on a 5-pin, 3.5 mm pitch, COMBICON connector.

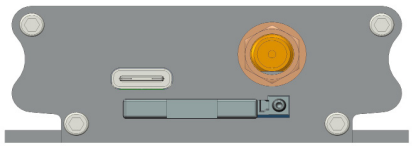
** i.e with integrated transformer, thus allowing for 1.5 km-long cabling*



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





HARDWARE

Casing Extruded Aluminium

Dimensions 60 x 66 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

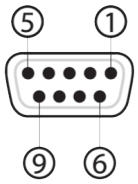
Main Source 8 VDC ~ 32 VDC w/ Slow Start and absorption of 2G current bursts

Last Gasp *(factory option)* Approximately 20-second-long via two industrial-grade super caps

INTERFACES

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

1. DCD
2. Rx
3. Tx
4. DTR
5. Ground
6. DSR
7. RTS
8. CTS
9. 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

** 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)*

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™

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	Q1 '18	M111#02
	World excluding Japan, Korea		2/3/5/8				TBD		M111
M112	EMEA	NB-IoT	8	×	N/A			Q2 '18	M112#8
			20						M112#K
			8/20						M112#8K
	Asia Pacific		5						M112#5
			28						M112#S
M113	Verizon Wireless	LTE-M1	13			×	FCC (**), Verizon Wireless		M113#D
	AT&T Wireless, T-Mobile USA, Sprint		2/4/5/12				FCC (**), PTCRB, AT&T Wireless		M113#245C
	World	LTE-M1 NB-IoT	2/3/4/5/8/ 12/13/20/28	2G	3/8		TBD	Q3 '18	M113
M114	EMEA	LTE cat. 1	3/7/20				RED, GCF	Q1 '18	M114#37K##38
	Asia Pacific		3/8/28	3G	1		RCM, NCC, NBTC	Q2 '18	M114#38S#1
	NTT docomo		1/19	×	N/A		JPA, JRF	Q3 '18	M114#1J
M115	EMEA, [most of] Asia Pacific	3G	1/8	2G	3/8		TBD	Q1 '18	M115#02
	World		1/2/5/8		2/3/5/8		RED, GCF		M115

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; LTE cat. 1: 5 / 10 Mbps

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

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