

	MX-4 HM	MX-4 T30	MX-4 T30 FR	MX-4 C61	MX-4 CT GL
Part Number	HMP069/9c (EU Modem) HMP069/9d (US Modem)	HMP075/2 (EU MODEM) HMP075/6 (US MODEM)	HMP075/4 (EU MODEM) HMP075/7 (US MODEM)	HM005 (GLB Modem)	HM001/1 (GLB MODEM)
Size	174.1x166x32 mm	127x166x32 mm	127x166x32 mm	93.6x90x24.5 mm	175 x 167 x 32 mm
Weight	580 g	456 g	456 g	?	830 g
IP	IP 30	IP 30	IP 30	IP 30	IP 30
Temperature Rating	-40 - +70 °C	-40 - +70 °C	-40 - +70 °C	-40 - +70 °C	-40 - +70 °C
Connectors	14 pin JAE IL AG-5 18 pin JAE IL AG-5 22 pin JAE IL AG-5	D-Sub 15-pin male D-Sub 25-pin male	D-Sub 9-pin male D-Sub 15-pin male D-Sub 25-pin male	D-Sub 15-pin male	14 pin JAE IL AG-5 18 pin JAE IL AG-5 22 pin JAE IL AG-5
Audiokontakt	14 pin JAE IL AG-5	2 x 3.5 mm stereo jack	2 x 3.5 mm stereo jack	-	14 pin JAE IL AG-5
USB Connectors	2 x USB Type B (High Retention)	2 x USB Type B (High Retention)	2 x USB Type B (High Retention)	1 x USB Type B (High Retention)	2 x USB Type B (High Retention)
Antenna, GPS	FAKRA Code C (Blue)	FAKRA Code C (Blue)	FAKRA Code C (Blue)	FAKRA Code C (Blue)	FAKRA Code C (Blue)
Antenna, LTE/GPRS	FAKRA Code D (Bordeaux)	FAKRA Code D (Bordeaux)	FAKRA Code D (Bordeaux)	FAKRA Code D (Bordeaux)	FAKRA Code D (Bordeaux)
Antennkontakt WIFI	FAKRA Code I (Beige)	FAKRA Code I (Beige)	FAKRA Code I (Beige)	-	FAKRA Code I (Beige)
Antennkontakt Diversity (LTE/GPRS)	-	-	-	-	FAKRA Code D (Bordeaux)
Ethernet Connector	2 x RJ45	2 x RJ45	2 x RJ45	1x RJ45	2 x RJ45
SIM-card connector	External	Internal	Internal	Internal	Internal
Internal watchdog	Yes	Yes	Yes	Yes	Yes
Boot loader	uBoot	uBoot	uBoot	uBoot	uBoot
OS	Linux 3.1.10	Linux 3.1.10 or Linux 4.19	Linux 3.1.10 or Linux 4.19	Linux 4.4	Linux 3.1.10
CPU	ARM Cortex-A9	ARM Cortex-A9	ARM Cortex-A9	ARM Cortex-A5 ARM Cortex-M4	ARM Cortex-A9
CPU Frequency	Dual Core, 1.0 GHz	Quad Core, 1.4 GHz	Quad Core, 1.4 GHz	500 MHz 167 MHz	Dual Core, 1.0 GHz
RAM	512 MB DDR2 (32 bit)	1 GB DDR3 (32 bit)	1 GB DDR3 (32 bit)	256 MB DDR3 (16 Bit)	512 MB DDR2 (32 bit)
Flash	1 GB NAND (8 bit)	4 GB eMMC	4 GB eMMC	512 MB NAND (8 Bit)	1 GB NAND (8 bit)
Power Supply	8 - 36 V	8 - 36 V	8 - 36 V	8 - 36 V	8 - 36 V
GSM/GPRS/Edge (Fallback)	900/1800MHz	900/1800MHz	900/1800MHz	900/1800MHz	900/1800MHz
LTE	800 (Bd20) / 900 (Bd8) / 1800 (Bd3) / 2100 (Bd1) / 2600MHz (Bd7)	800 (Bd20) / 900 (Bd8) / 1800 (Bd3) / 2100 (Bd1) / 2600MHz (Bd7)	800 (Bd20) / 900 (Bd8) / 1800 (Bd3) / 2100 (Bd1) / 2600MHz (Bd7)	800 (Bd20) / 900 (Bd8) / 1800 (Bd3) / 2100 (Bd1) / 2600MHz (Bd7)	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/ B19/B20/B25/B26/B28 LTE TDD: B38/B39/B40/B41 UMTS: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8
WiFi	802.11 b/g/n	802.11 b/g/n	802.11 a/b/g/n Dual Band	-	802.11 b/g/n
GNSS-mottagare	GPS+GLONASS	GPS+GLONASS	GPS+GLONASS	GPS+GLONASS	GPS+GLONASS+BeiDou+Galileo
Ext. startsignal	Yes	Yes	Yes	Yes	Yes
Int. startswitch	No	Yes	Yes	No	No
Analogue Input	3 x 0-32 V, 1 x 4-20 mA	2 x 0-32 V	2 x 0-32 V	2	3 x 0-32 V, 1 x 4-20 mA
Analogue Output	-	-	-	2	-
Digital Input	6	6	6	2	6
Digital Output	5	6	6	2	7
Pulse Counter	1	1	1	-	1
Accelerometer	Yes	Yes	Yes	Yes	Yes
µSD-korthållare	-	Yes	Yes	Yes	-
Ethernet	2 x 10/100 Mbit/s	2 x 10/100 Mbit/s	2 x 10/100 Mbit/s	1 x 10/100 Mbit/s	1 x 10/100 Mbit/s 1 x 10/100/1000 Mbit/s
Optical Ethernet	-	-	-	-	-
CAN	3 x CAN 2.0 B	6 x CAN 2.0 B	6 x CAN 2.0 B	3 x CAN 2.0 B	3 x CAN 2.0 B
FlexRay	-	-	2.1 RevA, A and B Channel	-	-
USB Host	1 x 2.0 Hi-Speed	1 x 2.0 Hi-Speed	1 x 2.0 Hi-Speed	-	1 x 2.0 Hi-Speed
USB Device	-	-	-	-	-
USB OTG (Host/Device)	1 x 2.0 Hi-Speed	1 x 2.0 Hi-Speed	1 x 2.0 Hi-Speed	1 x 2.0 Hi-Speed	1 x 2.0 Hi-Speed
RS-232	2	-	-	1	2
RS-485	1	-	-	1 or J1708	1
RS-422	-	-	-	-	-
J1708	1	-	-	1 or Rs485	1
LIN	-	2	2	0	-
K-Line	-	-	-	-	-
L-Line	-	-	-	-	-
5V Out (500mA max)	1	1	1	-	1
CPU Audio	Yes	Yes	Yes	Yes	Yes
Modem Audio	Yes	-	-	-	Yes
Graphics Port	DVI-I (1080p)	-	-	-	DVI-I (1080p)
Dual Display Support	Yes	-	-	-	Yes
Internt batteri	No	Optional	Optional	No	RTC (Backup)
Super Capacitor	No	Yes	Yes	Yes	-
LED	4 x biLED, 1 x LED	5 x biLED	5 x biLED	4 x biLED	4 x biLED, 1 x LED
Buzzer	-	Yes	Yes	-	-
Current Consumption	200 mA - 800 mA @ 24 V	160 mA - 400 mA @ 24 V	160 mA - 400 mA @ 24 V	52 mA - 300 mA @ 24 V	200 mA - 400 mA @ 24 V
Current consumption, sleep (typical)	12 mA @ 24 V	24 mA @ 24 V	24 mA @ 24 V	7 mA @ 24 V	12 mA @ 24 V