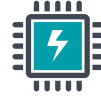


EC900-8MM EC910-8MM



NXP i.MX8M Mini Processor
Ultra Small Size Embedded System

KEY FEATURES



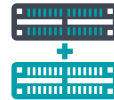
NXP i.MX8M Mini Platform

Quad Core Max.1.8GHz



High Speed Memory Down

LPDDR4 3200MHz



Multiple Expansions

M.2 support, WiFi/BT, LTE



Rich I/O

2 GbE LAN, 2 USB, 4bit DIO, RS422, RS485



Wide Voltage

Support 9~36VDC

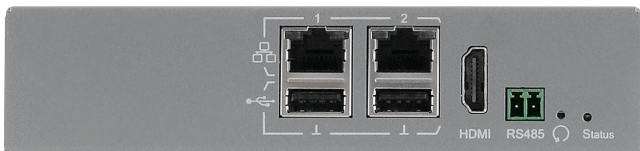


Photo for EC900-8MM



PANEL

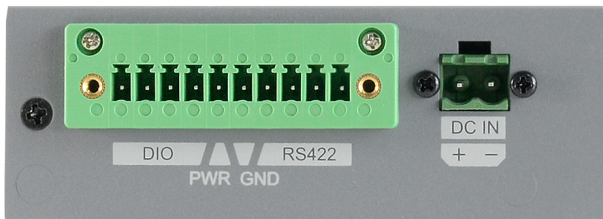
EC900-8MM



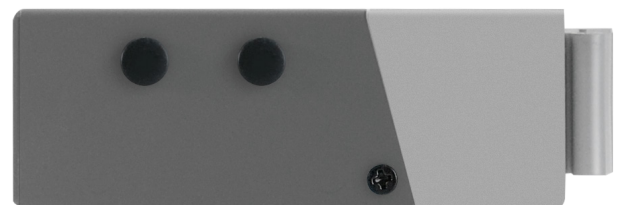
Front View



Rear View



Left View



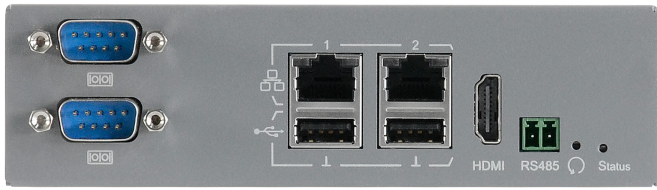
Right View



Desire For Innovation

PANEL

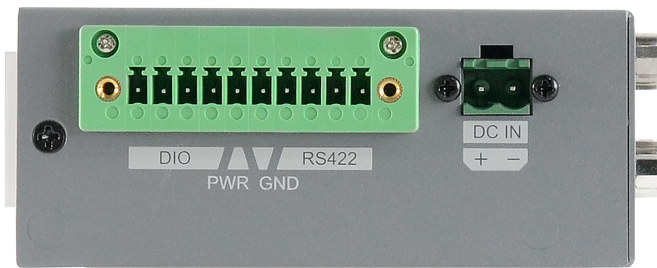
EC910-8MM



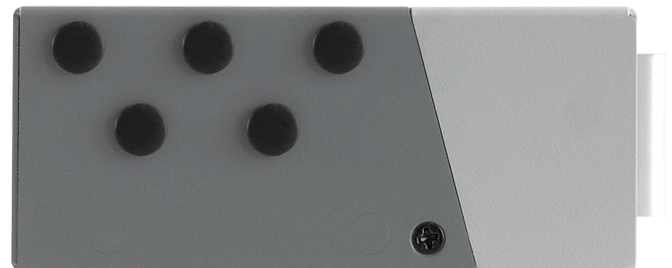
Front View



Rear View



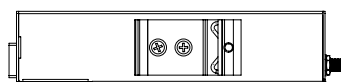
Left View



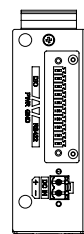
Right View

DIMENSIONS

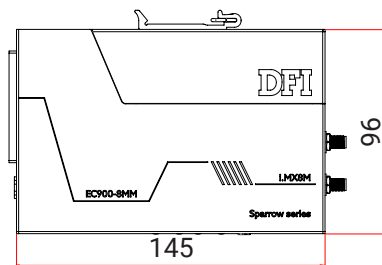
EC900-8MM



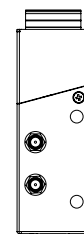
Front View



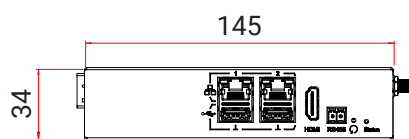
Left View



Rear View

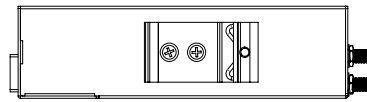


Right View

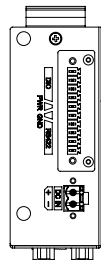


DIMENSIONS

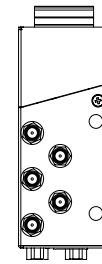
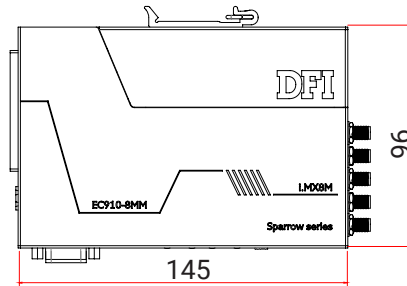
EC910-8MM



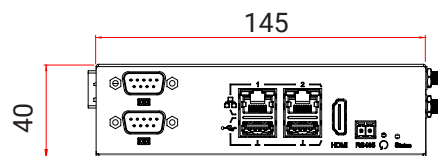
Front View



Left View



Right View

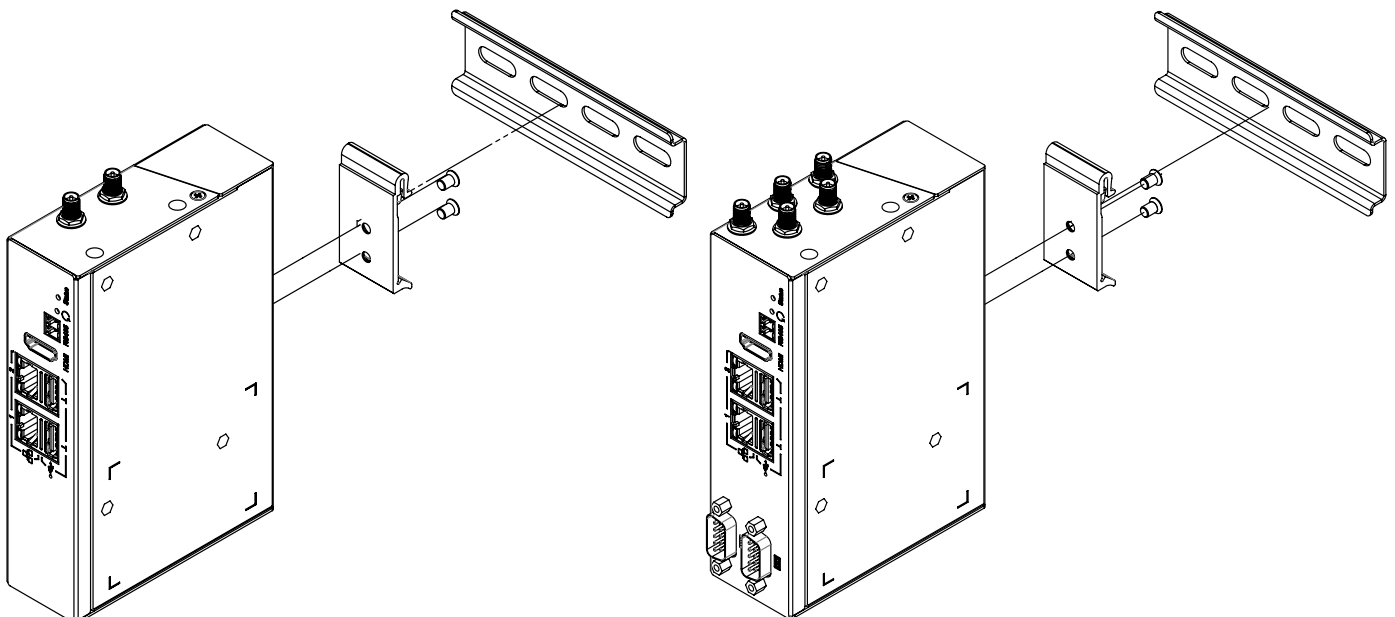


Rear View

DIN RAIL MOUNTING

EC900-8MM

EC910-8MM



SPECIFICATION



Model Name		EC900-8MM	EC910-8MM
Platform		ARM	
SYSTEM	Processor	I.MX8M mini Quad core, VPU/HDR10/GPU,1.6/1.8Ghz, Commercial temp	I.MX8M mini Quad core, VPU/HDR10/GPU,1.6/1.8Ghz, Commercial temp
	Memory	LPDDR4 die size, up to 8GB (Default 1GB & 4GB)	LPDDR4 die size, up to 8GB (Default 1GB & 4GB)
DISPLAY	Display	1 x HDMI HDMI: resolution up to 1920x1080 @ 60 Hz	1 x HDMI HDMI: resolution up to 1920x1080 @ 60 Hz
	Single Display	HDMI	HDMI
STORAGE	External / Internal	eMMC up to 64GB (Default 8GB) Micro-SD Card Socket	eMMC up to 64GB (Default 8GB) Micro-SD Card Socket
EXPANSION	Interface	1 x M.2 E key 2230 (USB) 1 x M.2 B key 3042/2242 (USB) 1 x Nano SIM slot	1 x M.2 E key 2230 (USB) 1 x M.2 B key 3042/2242 (USB) 1 x Nano SIM slot
ETHERNET	Controller	1 x ATHEROS Ethernet Controller RTL8211 (10/100/1000Mbps) 1 x Ethernet Controller (10/100/1000Mbps)	1 x ATHEROS Ethernet Controller RTL8211 (10/100/1000Mbps) 1 x Ethernet Controller (10/100/1000Mbps)
LED	Indicators	1 x Status LED	1 x Status LED
I/O	Ethernet	2 x GbE (RJ-45)	2 x GbE (RJ-45)
	Serial	1 x RS-485 (Via terminal block) 1 x RS-422 (Via terminal block)	1 x RS-485 (Via terminal block) 1 x RS-422 (Via terminal block) 2 x RS-232 (DB9)
	USB	2 x USB 2.0 (type A)	2 x USB 2.0 (type A)
	Display	1 x HDMI	1 x HDMI
	Button	1 x Power Reset Button	1 x Power Reset Button
	Wi-Fi Antenna	2 x Antenna Hole	6 x Antenna Hole
	DIO	4-bit DIO (Via terminal block)	4-bit DIO (Via terminal block)
INTERNAL I/O	USB	1 x USB 2.0 1 x OTG USB Type C	1 x USB 2.0 1 x OTG USB Type C
	Serial	2 x RS-232	N/A
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	TPM 2.0/TrustZone(Opt.)	TPM 2.0/TrustZone(Opt.)
POWER	Type	Wide Range 9~36V	Wide Range 9~36V
	Connector	Via Terminal Block	Via Terminal Block
	Consumption	Idle: 4.6W, Max : 6.4W	Idle: 4.6W, Max : 6.4W
OS SUPPORT	OS Support	Yocto 3.3, Kernel 5.10.72	Yocto 3.3, Kernel 5.10.72
MECHANISM	Construction	Sheet Metal	Sheet Metal
	Mounting	DIN Rail Mount	DIN Rail Mount
	Dimensions (W x H x D)	145mm x 34mm x 96mm	145mm x 40mm x 96mm
	Weight	0.45 kg	0.55kg
ENVIRONMENT	Operating Temperature	-5 to 60°C -40 to 70°C (available upon request)	-5 to 60°C -40 to 70°C (available upon request)
	Storage Temperature	-40 to 85°C	-40 to 85°C
	Relative Humidity	10 to 95% RH (non-condensing)	10 to 95% RH (non-condensing)
STANDARDS AND CERTIFICATIONS	Shock	Operating: 3G, 11ms Non-Operating: 5G, 11ms	Operating: 3G, 11ms Non-Operating: 5G, 11ms
	Vibration	Operating: Random 5~500Hz, IEC68-2-64 (3G) Non-Operating: Sine 10~500Hz, IEC68-2-6 (3G)	Operating: Random 5~500Hz, IEC68-2-64 (3G) Non-Operating: Sine 10~500Hz, IEC68-2-6 (3G)
	Certification	CE, FCC Class A, UKCA, RoHS	CE, FCC Class A, UKCA, RoHS

ORDERING INFORMATION

Model Name	Part Number	Op. Temp.	On board Memory LPDDR4	Storage eMMC	Display (HDMI)	LAN (GbE)	USB 2.0	RS-485	RS-422	RS-232	DIO	Security	OS
EC900-8MM	750-EC9001-000G	-5~60°C	1GB	8GB	1	2	2	1	1	NA	4-bit	-	Yocto 3.3 (Kernel 5.10)
EC900-8MM	750-EC9001-200G	-5~60°C	4GB							NA		-	
EC900-8MM	750-EC9001-500G	-40~70°C	4GB							NA		-	
EC910-8MM	750-EC9101-000G	-5~60°C	1GB							2 DB9		-	
EC910-8MM	750-EC9101-100G	-5~60°C	4GB							2 DB9		-	
EC910-8MM	750-EC9101-400G	-40~70°C	2GB							2 DB9		-	
EC910-8MM	750-EC9101-500G	-40~70°C	4GB							2 DB9		-	
EC910-8MM	750-EC9101-600G	-40~70°C	4GB							2 DB9		TPM 2.0/TrustZone	

OPTIONAL ITEMS

Optional Items	Part Number	Description
Power Adapter	671-102002-000G	POWER ADAPTER 100~240V 24V/1A 24W 100x45x31mm L=1500mm(EDAC) EA1024J1 (03) LV6 RoHS
	671-102501-000G	POWER ADAPTER 25W; GST25A24; Input:100~240V; Output:24Vdc/1.04A; 93x54x36mm L=1800mm Stripped and tinned leads; LV6; GST25A24-DFI(MEAN WELL)RoHS
Power Cord	785-PWRD	Standard (USA/EUR/CH...) Power Cord
WiFi/BT module	612-RTL882-000G	Wi-Fi+BT(V5.0+LE and BR/EDR) M.2 2230 Combo Module Card RTL8822CE(ENLI)RoHS

PACKING LIST

• 1 System unit
• 1 10-Pole Terminal Block for RS-422/4-bit DIO
• 1 2-Pole Terminal Block for RS-485
• 1 2-Pole Terminal Block for Power Input
• 1 DIN Rail Bracket/Screw Pack
• 1 Quick Installation Guide