

TEP-0500-IMX7

- The TEP-0500-IMX7 is a low-power consumption HMI based on an NXP i.MX7 Dual core Cortex-A7™ + M4™ processor.
- Features a 5-inch widescreen ratio multitouch PCAP touch screen with LED backlight and brushed aluminum front bezel.
- Edge-computing ready with internal mini-PCIe expansion + SIM card slot for cloud connectivity.
- 2 RS-232, 2 CAN, 8 GPIO, 2 Gigabit Ethernet and USB interfaces.
- Orderable with single voltage 12V DC, wide voltage 9 - 36V DC or 802.3at PoE (power over ethernet) options.



Specifications

Core System

Processor	NXP i.MX7 Dual
Processor Speed	1.2 Ghz
Architecture	ARM Cortex-A7 + M4
PMIC	NXP PF3000
Memory	Up to 2GB DDR3L
Storage	4GB eMMC

Connectivity

Network LAN	2x Realtek RTL8211
Power over Ethernet	PoE function 802.3at (optional)

Power Specifications

Power Input	Available with 12V 9-36V (wide power input)
Power Connector	2-pin Micro-Fit 3.0
Power Consumption	Depending on Configuration

Operating Systems

Standard Support	Linux Yocto Android Ubuntu
Extended Support	Commercial Linux

Environmental and Mechanical

Enclosure Material	Metal
Front Bezel	Brushed Anodized Aluminium
IP Rating	IP65 Front
Dimensions	150.3(W) x 105.6(H) x 42.1(D) mm
Relative Humidity	10 to 90 %
MTBF	50,000 Hours
Shock	15G half-sine 11 ms duration
Operation Temperature	Commercial: 0° to +50°C
Vibration	1 Grms random 5-500Hz hr/axis
Weight	550 grams

Mounting Options

Rear Mounting	4 mounting clips required (included)
VESA Mounting	35*75 VESA MIS C. Standard (separate purchase)
Surface Mounting	8 mounting holes

Modular Expansion Options

Power Expansion Module	TXR-P1-1030V-LAN1 (9-36V 5A) TXR-P1-12V-LAN1 (12V 3A) TXR-P1-12V-POE1 (12V 3A) or (PoE 802.3at)
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Display

LCD	5 inch widescreen LCD with LED backlight
Resolution	800 x 480 pixels
Luminance	300 cd/m ²
Maximum Colors	16.7 million
Touchscreen	Projective Capacitive (multitouch)

External Connectors

Network	2x RJ45
USB	1x USB 2.0 Host 1x USB 2.0 OTG (Type-C)
CAN Bus	2x Flex CAN version 2.0B compliant
Serial	2x RS-232
GPIO	8x GPIO
Buttons	1x Boot Select 1x Reset
Indicators	1x Programmable LED
SIM Cardslot	1x Nano-SIM Card slot
SD Cardslot	1x MicroSD Card slot

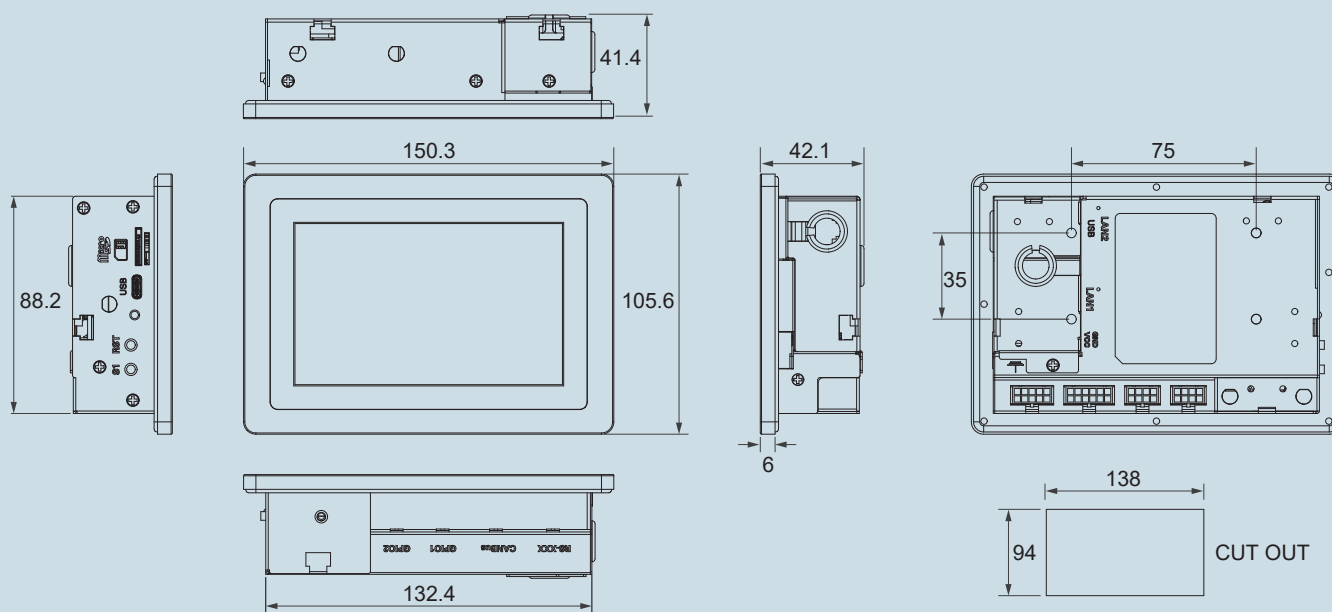
Expansion Interfaces

Expansion Slots	1x M.2 Slot with SIM Cardslot
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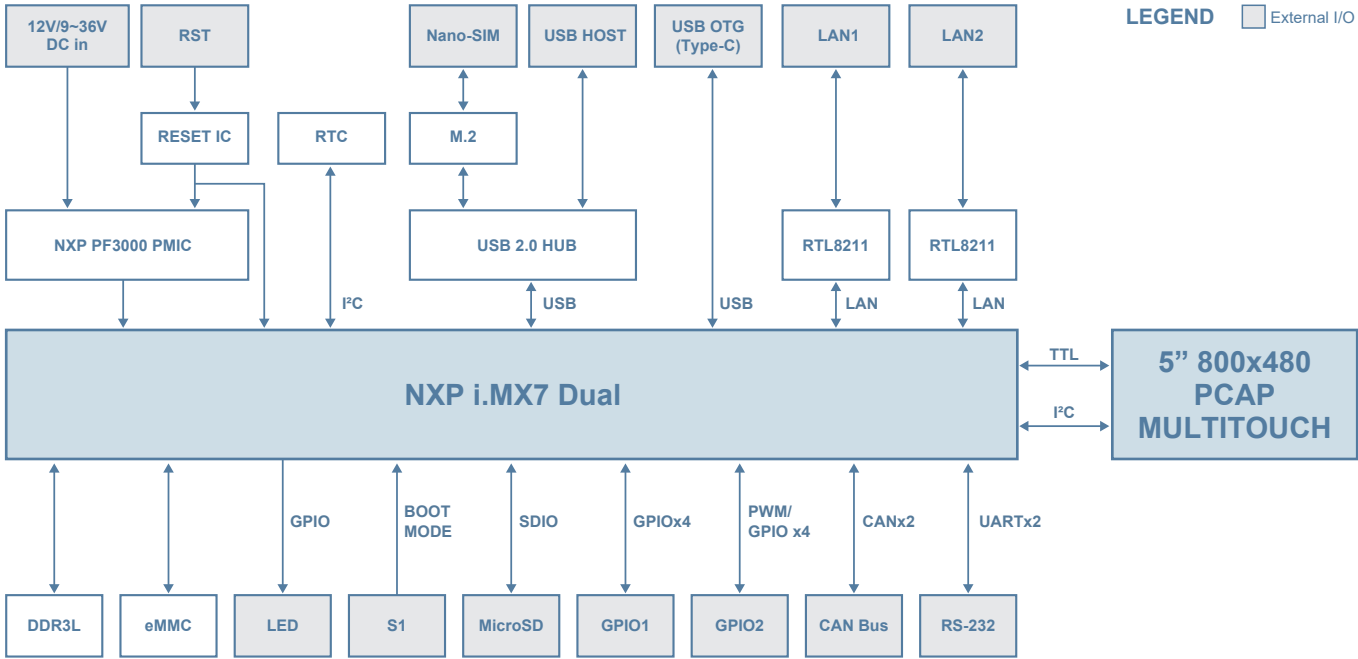
Certification and Compliance

Certification	Compliant with CE / FCC / RoHS / REACH directives
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Dimensions (units in mm)



Block Diagram



Order Information

TEP0500-IMX7x-Rxx-Exx-Lxxx-xxxx-xxxx

	Code	Description
Processor	IMX7D	NXP i.MX7 Dual
Memory	R05	512MHz DDR3L
	R10	1GB DDR3L
	R20	2GB DDR3L
Storage	E04	eMMC capacity E04 = 4GB / E16 = 16GB / E32 = 32GB / E64 = 64GB
Power Expansion	L112	TXB-P1-12V-LAN1 (12V 3A)
	L130	TXB-P1-1030V-LAN1 (9-36V 5A)
	LPOE	TXB-P1-12V-POE1 (12V 3A) or (PoE 802.3at)
Custom ID	XXXX	Custom Part number ID for customized Software loader and special component (BOM)