

TEK3-IMX6UL



- The TEK3-IMX6UL is a cost-optimized general industrial applications IoT gateway based on an NXP i.MX6UL / ULL core Cortex-A7™ processor.
- Edge-computing ready with internal mini-PCIe expansion + SIM card slot for LTE/5G cloud connectivity.
- All aluminum ruggedized heated-dissipating fanless box PC with DIN-30 and side rail mounting.
- Orderable with single voltage 12VDC, wide voltage 9 - 36VDC or 802.3at PoE (power over ethernet) options and GPIO, UART, CAN interfaces (optional galvanic isolated) for headless or VGA display.
- Linux and Yocto runtime images and full source code available.

Specifications



Sensor Information

Processor	NXP i.MX6 UL
Architecture	ARM Cortex-A7
PMIC	NXP PF3000
Memory	Up to 1GB DDR3L
Storage	eMMC (4GB Default)

Connectivity

Network LAN	2x Micrel KSZ8081RNBCA 10/100 LAN
Power over Ethernet	PoE function 802.3at (optional)

Expansion Interfaces

Expansion Slots	1x M.2 slot (USB signals only) 1x mini-PCIe with Micro-SIM card slot (USB signals only)
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Power Specifications

Power Input	12V 9-36V (wide power input)
Power Over Ethernet	PoE function 802.3at (optional)
Power Connector	2-pin Micro-Fit 3.0
Power Consumption	Depending on Configuration

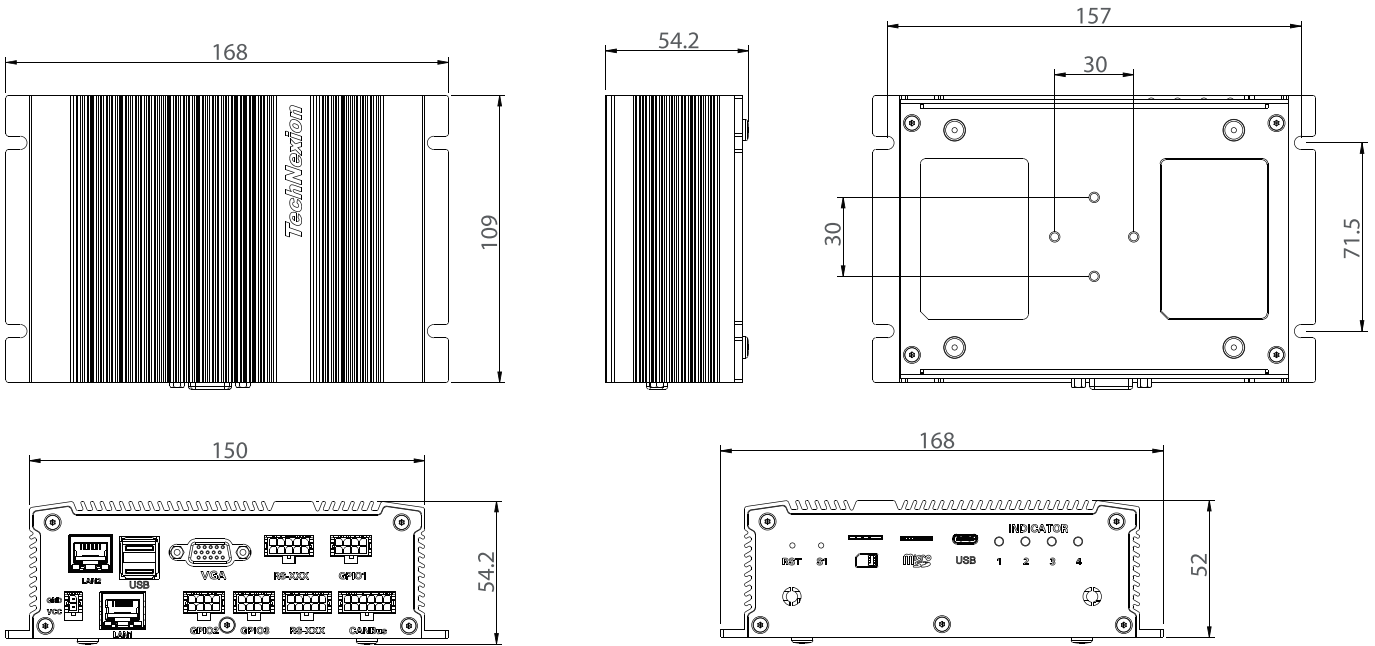
Operation Systems

Standard Support	Linux Yocto
Extended Support	Commercial Linux

External Connectors

External Display	1x VGA 15-pin D-SUB
Audio Connectors	1x 3.5mm jack Microphone 1x 3.5mm jack Stereo Audio in 1x 3.5mm jack Stereo Audio out
Network	2x RJ45
USB	1x USB 2.0 OTG (Type-C) 2x USB 2.0 Host
Serial	2x RS-232
GPIO	4x GPIO
Buttons	1x Boot Select 1x Reset
Indicators	4x Programmable LED's
SIM Cardslot	1x Micro-SIM Card slot
SD Cardslot	1x MicroSD Card slot

Dimensions (units in mm)



Environmental and Mechanical

Enclosure Material	Anodized Aluminium
Dimensions	168 (W) x 109 (H) x 55 (D) mm
Weight	705 grams
Temperature	Commercial: 0° to +50°C Extended: -20° to +50°C
Relative Humidity	10 to 90 %
MTBF	50 000 Hours
Shock	30G half-sine 11 ms duration
Vibration	3 Grms random 5-500Hz hr/axis
Certification	Compliant with CE / FCC / RoHS / REACH directives

Modular Expansion Options

Power Expansion Module	TXB-P1-12V-LAN1 (12V 3A) TXB-P1-1030V-LAN1 (9-36V 5A) TXB-P1-12V-POE1 (12V 3A) or (PoE 802.3at)
I/O Expansion Module	TXB-I2-GS2-GC2-GG8 (Galvanic Isolated) 2x RS-232 + 2x CAN + 8x GPIO TXB-I2-S2-C2-G8 2x RS-232 + 2x CAN + 8x GPIO

Mounting Options

Surface Mounting	4 mounting holes
DIN Mounting	30mm DIN rail standard (DIN bracket separate purchase)

Order Information

TEK3-IMX6G-05-Rxx-Exx-x-Lxxx-xxxx-xx-xxxx

	Code	Description
Processor	IMX6G	NXP i.MX6 UltraLite
Processor Speed	05	528MHz
Memory	R05	512MB DDR3L
Storage	E04	eMMC capacity E04 = 4GB / E16 = 16GB / E32 = 32GB / E64 = 64GB
Electrical Isolation	-	-
	G	Galvanic Isolated
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)
I/O Expansion	-	-
	XS20 XG20	2x RS-232 + 2x CAN + 8x GPIO 2x RS-232 + 2x CAN + 8x GPIO (Galvanic Isolated)
Temperature Range	-	Commercial Temperature range (0° to 50°C)
	TE	Extended Temperature range (-20° to +50°C)
Custom ID	XXXX	Custom Part number ID for customized Software loader and special component (BOM)