



# KontronGrid

## Standard IoT Stack



KontronOS  
pre-installed



Kbox A-250 „Premium“



AL i.MX8M Mini „Compact“

### Performance

Intel x5-E3940 Quad Core  
(4x 1.6 GHz; 9,5W)

CPU

NXP i.MX8M Mini 4x ARM®  
Cortex®-A53@1.6 GHz

4 GB / 8 GB SSD

RAM / HDD

4 GB / 32 GB eMMC

### Interfaces

1x GbE ETH, 1 Fast ETH, WOL support,  
2x USB 3.0

1x Serial (COM1, RS232),  
9-pin GPIO Connector

1x DisplayPort V1.2

Network and  
Interfaces

1x GbE ETH, 1x 10/100 MbE,  
2x USB 2.0 (Host), 1x USB 2.0 (OTG),  
1x RS232, 1x RS485, 1x CAN 2.0, 4x DIO  
1x HDMI, 1x LVDS, up to 1920 x 1080  
@60fps

1x M.2 Key M for 2242, 2260, 2280

1x mPCIe for mSATA

Internal expansion  
slots / SD-Card

1x micro SD-Card-Slot

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## Mechanical information

DIN rail / wall mount / desktop	Mounting	DIN rail
Aluminium	Material	Stainless steel
150 x 58 x 100 mm	Dimensions	111 x 25 x 76 mm
about 1.0 kg	Weight	< 1.0 kg
IP20	Protection Class	IP20

## Environment

fanless	Cooling	fanless
0 °C to + 45 °C (max. power consumption 24,5W)	Operating temperature	0 °C to + 55 °C
93 % @40°C, non-condensing	Relative humidity	
according IEC 60068-2-6, 5-500 Hz, 1G	Operating vibration	
according IEC 60068-2-27, half sine, 15g, 11 ms	Operating shock	
24 VDC (+/- 20%)	Power supply	24 VDC (+/- 20%)
WIFI module / 4G LTE module, with antenna	WIFI / LTE	-/-

## Security

TPM V2.0	Security	HAB Secure Boot, Trust Zone, True RNG, RSA to 4096, AES-128/192/256, 3DES, ARC4, MD-5, SHA up to 256, ECC, Secure JTAG
CE, FCC, CB Schema, UL61010-1, UL61010-2-201	Certification	CE

## Software

KontronOS (Linux Yocto) pre-installed	Operation system	KontronOS (Linux Yocto) pre-installed
Agent (Javascript) pre-installed via Node-RED in Docker (optional)	KontronGrid connection Machine connection	Agent (Javascript) pre-installed via Node-RED in Docker (optional)
	Bootloader / DEBUG / AUDIO	U-Boot / 1x Console / 1x Buzzer
	RTC / RTC-Puffering	5 ppm accuracy / CR1220