XA105 - Preliminary Tech Note

5" Capacitive Sunlight-readable, IP66/69K, 2x CAN, 1x Eth., Wi-Fi, Multiprotocol, JMobile runtime

- 5" capacitive display, sunlight-readable for visibility in all lighting
- IP66/69K-certified for high protection against water, dust, and pressure
- 2x CAN interfaces for seamless integration with vehicle systems
- 1x Ethernet port for networking flexibility
- Multiprotocol support for industrial and mobile standards
- JMobile runtime enables customizable UIs, data logging, and remote access

Highlights

Engineered for the demands of mobile machinery and commercial vehicles, this 5" capacitive sunlight-readable HMI brings powerful edge intelligence to harsh, dynamic environments. With a robust IP66/69K-rated housing, and built-in Wi-Fi and CAN interfaces, it supports real-time control, monitoring, and customization right at the source.

Whether in construction, agriculture, logistics, or off-highway applications, this HMI delivers rugged reliability with the flexibility of JMobile runtime and a multiprotocol framework.
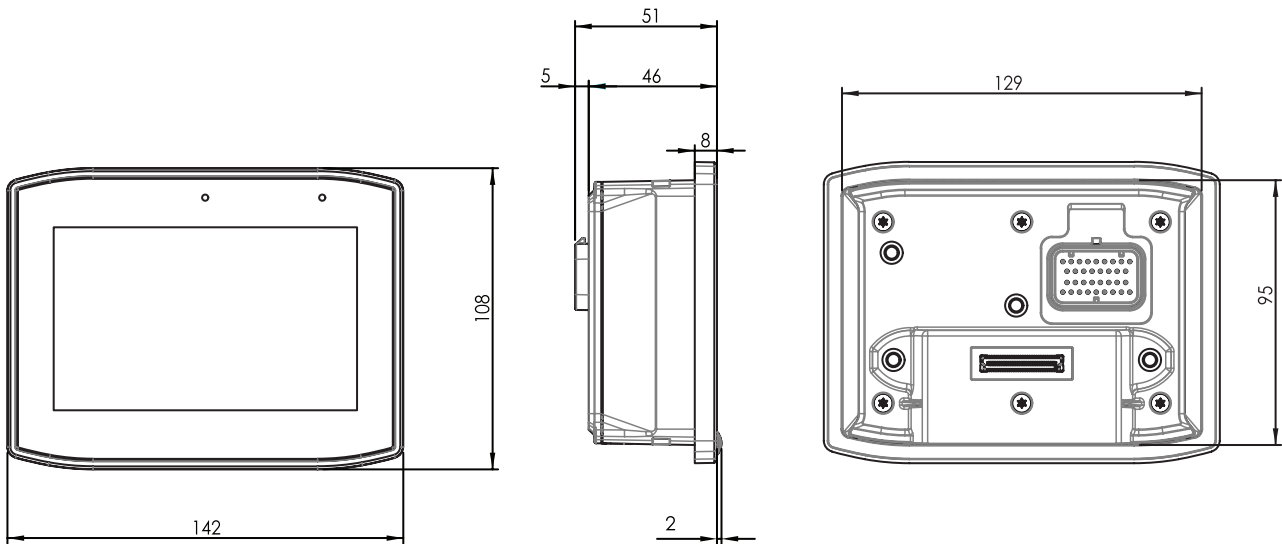
Optional features for XA105 include:

- Integrated push keys for enhanced HMI interaction
- Built-in Wi-Fi and Bluetooth connectivity
- Internal acceleration and temperature sensors for advanced diagnostics
- Plug-in expansion module for external camera integration

XA105 - Preliminary Technical Data

System Resources	
Display - Colors	5" TFT - 64K
Resolution	800x480
Brightness	500 Cd/m2 typ.
Dimming	Yes
Touchscreen	Projected Capacitive, Multitouch, Optical Bonding
CPU	32-bit RISC Dual Core 650 MHz
Operating System	Linux RT
Flash	4 GB (eMMC pSLC)
RAM	1 GB
FRAM	64 KB
Real Time Clock, RTC Back-up	Yes, rechargeable battery

Interface	
Ethernet port	1 ports 10/100 Mbit/s
CAN port	2 (2.0B, FD, isolated, up to 1 Mbit/s)
USB port	2 (Host v.2.0 200mA)
Serial port	RS-485/RS-232 (optional)
Digital Inputs	4 (High side 0 - 32 V)
Digital Output	4 (Low side 500 mA)
Wi-Fi	IEEE 802.11a/b/g (optional)
Sensors	Temperature, 3-Axis Accelerometer, Environment Light
Buzzer	Yes
Expansion	1 slot for plug-in modules

Ratings	
Power supply	24 Vdc (8 to 32 Vdc)
Power consumption	0.25A at 24 Vdc (max.)
Power management key	Yes

Environment Conditions	
Operating Temperature	-30°C to +65°C
Storage Temperature	-40°C to +85°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66, IP69K (front part) for the version without keys

Dimensions and Weights	
Faceplate LxH	142x108 mm (5.59 x4.25") without keys 142x108 mm (5.59 x4.25") with keys
Cutout AxB	129,5x95,5 mm (5.10x3.76") without keys 129,5x95,5 mm (5.10x3.76") with keys
Depth D	51 mm (2.00") without keys 53 mm (2.08") with keys
Weight	0,5 Kg without keys 0,6 Kg with keys

Approvals	
CE	Radio Equipment Directive 2014/53/EU (RED)
RCM	Yes

Ordering Information

Model	Part Number	Description
XA105	To be defined	5" Capacitive Sunlight-readable, IP66/69K, 2x CAN, 1x Eth., Wi-Fi, Multiprotocol, JMobile runtime