

Mobile HMI Platform

IntelliHMI

Mobile operator interface app for IntelliKran PLC controllers

IntelliHMI turns Android phones and tablets into configurable wireless HMIs for machine operation, monitoring, commissioning and diagnostics. It communicates directly with IntelliKran PLC controllers over Bluetooth, while enforcing secure authentication and role-based access for safe machine interaction.



Android
Platform



Bluetooth
Link



50 m
LOS Range

3 PLC Types
IKS Support

Wireless Access

Connect to controller over Bluetooth in local machine zones

Widget Screens

Build custom control and feedback pages for each machine use-case

Secure Login

Only authenticated users get access to controls and command paths

Live Monitoring

View real-time machine data using gauges, LEDs and meters

Core Highlights

Android Phone & Tablet HMI

Turns standard Android devices into a fully configurable HMI for machine operation, monitoring and diagnostics.

Bluetooth Communication

Direct wireless communication with IntelliKran PLC up to 50 meters line-of-sight for local machine-side control access.

Widget-Based Control Design

Administrators can build multiple screens using pushbuttons, potentiometers, joysticks, toggle switches and custom layout blocks.

Live Feedback Visualization

Displays digital and analog feedback through gauges, LEDs, meters and status indicators for real-time operator awareness.

Authenticated Access

Access can be restricted by username/password and device-supported biometric or NFC-based sign-in methods.

Role-Driven Permissions

Control permissions are enforced from the IntelliKran device so only authorized users can access allowed controls and pages.

WIDGETS

1. Pushbutton – Spring Return



2. Pushbutton – Latching



3. Toggle – O-R



4. Toggle – O-T



5. Toggle – R-O-R



6. Toggle – T-O-T



7. Toggle – T-O-R



8. Joystick – Single Axis Analog



9. Joystick – Single Axis Digital
5 steps, spring return



10. Joystick – Dual Axis Analog



11. Joystick – Dual Axis Digital
4 steps/axis, friction



12. LED Indicator



13. Potentiometer



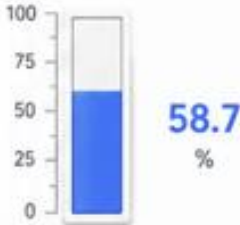
14. Horn / Buzzer



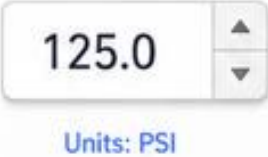
15. Radial Gauge



16. Linear Meter



17. Numeric Text Box



18. Value Card



19. Alarm Indicator



20. Mode Selector



VERSIONS



IntelliKran Mini

ENTRY

Compact dual-core controller with built-in WiFi and BLE — ideal for lightweight crane monitoring and basic control.

Total I/O 14
(9 in / 5 out)

	Digital Inputs	7 Digital
	Analog Inputs	2 Analog-Digital
	Digital Outputs	4 Digital
	Relay Outputs	1 Relay
	Communications	Ethernet, WiFi, BLE, RS485, I2C
	Optional Modules	NB-IoT, 4G, LoRa, GPRS
	Supply Voltage	12–24 VDC
	Operating Temp	-20°C to 60°C



IntelliKran Mid

STANDARD

Versatile mid-range controller with expanded I/O for multi-sensor crane monitoring.

Total I/O 21
(13 in / 8 out)

	Digital Inputs	7 isolated (2 with interrupts)
	Analog Inputs	6 Analog-Digital
	Digital Outputs	5 isolated
	Analog Outputs	3 Digital/PWM/Analog
	Communications	Ethernet, RS485, RS232, SPI, I2C, RTC
	Supply Voltage	12–24 VDC
	Operating Temp	-20°C to 60°C



IntelliKran Max

PRO

Full-featured platform for complex multi-crane automation, load monitoring, and advanced data acquisition.

Total I/O 38
(19 in / 19 out)

	Digital Inputs	9 isolated (4 with interrupts)
	Analog Inputs	10 Analog-Digital
	Relay Outputs	8 Relay
	Digital/Analog Outputs	5 isolated + 6 PWM/Analog
	Communications	Ethernet, RS485, RS232, 2x Serial, SPI, I2C, RTC
	Supply Voltage	12–24 VDC
	Operating Temp	-20°C to 60°C

Control, Feedback & Access Architecture

Designed for local machine-side operation, commissioning, service workflows and brownfield retrofit projects.

Request a Demo

Controller Compatibility

- Compatible with IntelliKran IKS Mini
- Compatible with IntelliKran IKS Mid
- Compatible with IntelliKran IKS Max
- Supports multi-page HMI layouts per machine type
- Designed for machine-side local operation and commissioning

Control Widgets

- Momentary and maintained pushbuttons
- Potentiometer sliders for variable setpoint control
- Virtual joystick controls for directional commands
- Toggle switch widgets for ON/OFF logic
- Selector states and mode switches
- Custom grouped control panels per subsystem

Feedback Widgets

- Digital status LEDs
- Analog and radial gauges
- Meter and value cards
- Alarm and warning indicators
- Live numeric process variables
- Connection quality and device heartbeat indicators

Authentication & Access Control

- User identities and access rights are configured in the IntelliKran device
- Only authenticated users can connect and execute controls
- Username and password based sign-in supported
- Fingerprint sign-in supported on compatible Android devices
- NFC card sign-in supported on compatible Android devices
- Per-user control visibility and command authorization can be restricted by role
- Session events can be logged for operational traceability

Typical Use Cases

- Mobile HMI for maintenance teams during machine commissioning
- Operator-side local control panel without additional wired HMI hardware
- Temporary service interface for diagnostics and fault recovery
- Multi-machine environments with role-based local UI access
- Brownfield retrofit projects adding modern mobile HMI capabilities

Technical Summary

Platform	Android phones and tablets
Communication	Bluetooth local link
Bluetooth Range	Up to 50 m line-of-sight
Supported Controllers	IKS Mini, IKS Mid, IKS Max
Control Widgets	Pushbuttons, potentiometers, joysticks, toggles, selectors
Feedback Widgets	Gauges, LEDs, meters, alarms, live values
Authentication	Username/password; fingerprint and NFC where supported
Access Control	Role and permission enforcement from IntelliKran device
Deployment	Local machine-side operation and service workflows

Build your mobile HMI workflows with IntelliHMI

Tell us your machine type, required controls and feedback points - we will help design an IntelliHMI screen model tailored to your operation.