

Vehicle validator V900

Reliable, compact and customizable state of the art vehicle validator to facilitate passenger experience, increase ridership and passenger throughput



Ensures remarkable **responsiveness** and allows **running multiple apps simultaneously** thanks to its powerful CPU (i.MX8M Mini with 4x Arm) and extended memory (2GB RAM and 32GB storage)

Delivers **open architecture** for easy integration with third-party systems like ORA (Open Reader Architecture).

Offers **flexibility** and **easy manageability** due to the latest available version of Linux Yocto

Maximizes accessibility by **reading all major ticketing formats** including contactless bank cards (cEMV), smartcards (NFC) and mobile and paper barcodes as well as Apple and Google Pay.

Supports **the highest level security** by providing PCI-PTS certification (6.0) as well as EMV1 + EMV2 but also through its optional **device management and secure OS** to distribute remotely software updates and data packages.

Guarantees full flexibility with its on demand **modular physical configuration** - screen size and type (3.5"/5.7", touch screen/TFT), - contactless or/and barcode reader.

Assures **easy installation and minimal maintenance** delays as removal and swap out of the validator can be performed in seconds.

Focuses on ergonomics, durability and **user friendly interface** with instructions to passengers for efficient service, improved customer experience and uninterrupted operations.

The Kontron validator is **Kontron's own device**, manufactured to Kontron's own design specifications, guaranteeing Kontron **production capacity** and **product life cycle management**.

SPECIFICATIONS	
Category	Details
CPU	i.MX8M Mini with 4x Arm [®] Cortex [®] A53
Operating system	Linux Yocto
Memory	2GB RAM
Storage	32GB
Electrical Interfaces	<ul style="list-style-type: none"> - 10/100 Mb/s Ethernet - RS232 port - 2xDigital input (option); 2xDigital output (option) - 1xUSB2.0 port
Contactless interface	PCI PTS (option) + EMV 1 EMV 2 EMV, EMV Contactless L1 3.X, EMV Contactless L2's, AMEX, Discover, Interac, Mastercard, Visa, MadaPay, NETs/PURE, RuPay, UPI, JCB, MIR Apple VAS, Apple ECP2, Google Pay SmartTap, MiFare Suite ISO 14443 Type A/B, ISO 18092 Initiator, Felica, Card Emulation Mode
Barcode interface	QR/2D barcode reader (option)
Communication interface	GSM 4G/ LTE/Wi-Fi/GPS (option)
SAM	4 SAM sockets ID000 ISO 7816 format
Human Interfaces	<ul style="list-style-type: none"> - 3.5" 5.7" or 8/10" color LCD display - With or without capacitive touchscreen - Adaptive brightness and color graphics - 4 LED indicators - 2 Watt speaker
Dimensions	H x W x D: 290mm x150mm x140mm (with mounting kit)
Mounting	Pole mounting
Power	Input 9 to 36 VDC - Nominal 24 VDC
Temperature operational	-20°C to +60°C
Temperature storage	-40°C to +85°C
Impact resistance	IK08 (housing material); IK07 (screen)
Humidity	Relative humidity of 0 – 95% (non-condensing)
Ingress protection	IP54
Shock and vibration	IEC 61373 Cat. 1
Others	Tamper detection mechanism Reverse polarity protection
Certifications	CE Marking Directive' (93/68/EEC), including <ul style="list-style-type: none"> - Electromagnetic Compatibility (EMC - EN55022) - EN55024, Immunity standard - Electromagnetic interference ECE R10 Rev.3 (ISO11452-2) - EC2004/104 and 7637-2 - Radio Equipment Directive (RED) - Restriction of Hazardous Substances (RoHS) EMV Level 1 certified EMV Level 2 certified E6 road certifications EN 50155:2018 Railway applications – Rolling Stock – Electronic Equipment Automotive certified: "UNECE Regulation 10 (e-marking)"

