VAL050
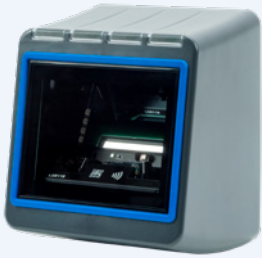## Barcode/NFC/RFID Ticket Validator

FLEXIBLE DESIGN

The VAL050 Onboard Validator is designed for use in a variety of public transportation automatic-fare collection systems. It combines a proven multimedia ticket reader with an open architecture Linux computer to create a mobile ticket validator. Designed for straight forward and simple integration with third party software and an optional remote display, the VAL050 provides a truly flexible solution for applications, including ticket offices and vehicle fitment.

POWERFUL VALIDATION

The validator combines barcode and NFC/RFID reading functionality to provide a single point of presentation for tickets and travel passes — whether presented on a paper ticket, smartcard or mobile phone.

CONTACTLESS EMV PAYMENTS

The VAL050 is available with EMV Level 2 certification, allowing for applications where contactless payments are required. It offers PCI and SRED compliance for contactless payments using VISA, MasterCard, AMEX, JCB and Discover payment schemes.

AUDIO AND VISUAL USER FEEDBACK

There are 4 colored (RGB) LEDs and a programmable speaker to confirm ticket reads.
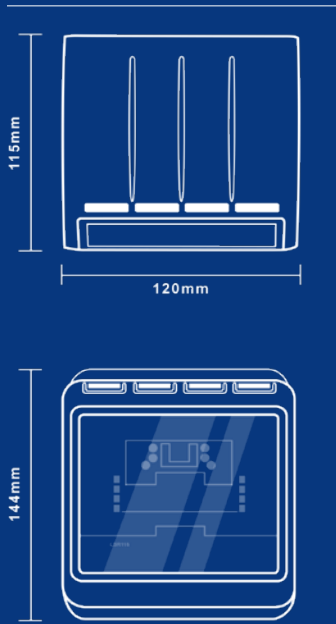
APPLICATIONS

- Ticket offices
- Buses
- Trams & Light Rail
- Coaches
- Metro

FEATURES:

- General Public Use - Robust design for long-term frontline use
- Intuitive - Single point of presentation for barcodes & NFC/RFID tickets
- User Feedback - LED user feedback to enhance passenger
- Audio Feedback - Programmable speaker to confirm ticket reads
- Easy Read - Optional remote displays available
- Any Media - Unique, optimized focal distance improves reading performance
- Simple Installation - Pole mount kit with quick release mechanism for easy access
- Software Integration - Linux computer with a variety of peripheral hardware for integration with a wide range of ticket validation software

HID

VAL050

115mm
120mm

144mm

FEATURES

Connection Types

⊟ Ethernet

Technology

▭ cEMV*

Ⓝ NFC / RFID

‖‖‖ QR/Barcode

* Optional

	VAL050	
	READING CAPABILITIES	
Barcode Symbologies Read	Linear: EAN / UPC, Code 2 of 5, Interleaved 2 of 5, IATA 2 of 5, Code 39, Code 128 2D: PDF417, Aztec, DataMatrix and QR codes Media types read: Smartphone/tablet/smartwatch displays & paper tickets	
Contactless Reader	Supported media: ISO14443 type A and B cards (Java cards); max baud 424K (extendable to 848K) Mifare Ultralight (UL-C, UL-EV1), Mifare DESFire, Mifare Plus, Mifare Classic, Mifare SmartMX Operating frequency: 13.56 MHz Operating distance: 2 in (40 mm)	
Contactless Payments	Integrated EMV L2 Payment Kernels with Level 2 Certification (VISA, MasterCard, AMEX, JCB, Discover)	
	ELECTRONIC	
Power Supply	9-36 volts from vehicle supply Input protected by automotive grade power conditioning circuitry	
Communications & Host	Wired: Ethernet Host: 1.0GHz ARM Cortex-A9 processor; 512-1024MB Ram; 32 or 128GB eMMC storage, Linux OS, full API and device access for developers LED indicators: 4 x RGB LEDs Sound: Speaker with digital control for audio playback	
	PHYSICAL	
Dimensions	5 x 5 x 6 in (120 x 115 x 144 mm)	
Weight	2 lbs. (920g)	
Body	Grey PC/ABS	
Glass	4mm Toughened White Soda Lime; BS EN60068-2-75 & IEC 62262:2002	
	THERMAL (AIR)	
Temperature	Operating -4°F to 122°F (-20°C to 50°C)	
Storage	-40°F to 158°F (-40°C to 70°C)	
Humidty	5-90% non-condensing	
	APPROVALS	
	Shock and Vibration: IEC 61373 Fire retardance: EN13501-1 EMC Approvals: FCC 47CFR Part 15 Class A EN55022: 2006 + Amd1: 2007; EN55024: 1998 + Amd1: 2001 + Amd2 2003 UL 60950-1 and CSA C22.2 No. 60950-1-07 IEC 60950-1 2nd edition IEC 60950-1 2nd edition including amendment 1 Safety: EN 60950-1: 2006; IEC 62471: 2006 - Exempt Class Ingress: IP54 MTBF: 50,000 hours	

To learn more, please contact us at: **access-is@hidglobal.com**