



AVIGILON[™]UNITY

HID Mercury Access Control Hardware Installation Guide

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AC-MER-CON-MR50 Specifications

Electrical	
Primary Power	12 to 24 V DC $\pm$ 10%, 150 mA maximum (plus reader current)
Outputs	2 x Form-C contact relays: K1: Normally open contact (NO) contact: 5 A @ 30 V DC resistive Normally closed contact (NC) contact: 3 A @ 30 V DC resistive K2: 1 A @ 30 V DC resistive
Inputs	2 x unsupervised/supervised, standard EOL, 1k/1k ohm, 1%, ¼ watt One unsupervised, dedicated for cabinet tamper
Communication	
SIO Communication	2-wire RS-485: 9600, 19200, 38400 or 115200 bps
Reader Interface	
Reader Power	12 to 24 V DC $\pm$ 10% (input voltage passed through)
Data Inputs	TTL compatible, F/2F or 2-wire RS-485
LED Output	TTL levels, high>3 V, low<0.5 V, 5 mA source/sink max.

Buzzer Output	Open collector, 12 V DC open circuit maximum, 40 mA sink max.
Cable Requirements	
Power	1 twisted pair, 18 AWG
RS-485	1 twisted pair with drain wire and shield, 24 AWG, 120 ohm impedance, 1,219 m (4,000') maximum
Alarm Input	1 twisted pair per input, 30 ohms maximum
Outputs	As required for the load
Reader data (TTL)	6-conductor, 18 AWG, 150 m (500') maximum
Reader data (F/2F)	4-conductor, 18 AWG, 150 m (500') maximum
Reader data (RS-485)	1 twisted pair with drain wire and shield, 24 AWG, 120 ohm impedance, 610 m (2,000') maximum
Environmental	
Operating Temperature	-40 °C to 75 °C (-40 °F to 167 °F)
Storage Temperature	-55 °C to 85 °C (-67 °F to 185°F)
Humidity	5 to 95% relative humidity, non-condensing
Mechanical	
Dimensions (W x L x H)	108 mm x 70 mm x 25.4mm; 4.25" x 2.75" x 1.0"
Weight	120 g (4 oz) nominal
UL294, 6th Edition Performance Levels	
Standby Power	I

Endurance	IV
Line Security	I
Destructive Attack	I

More Information & Support

For additional product documentation and software and firmware upgrades, visit support.avigilon.com.

Contact Avigilon Technical Support at support.avigilon.com/s/contactsupport.

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PDF generated on 04 24, 2026

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