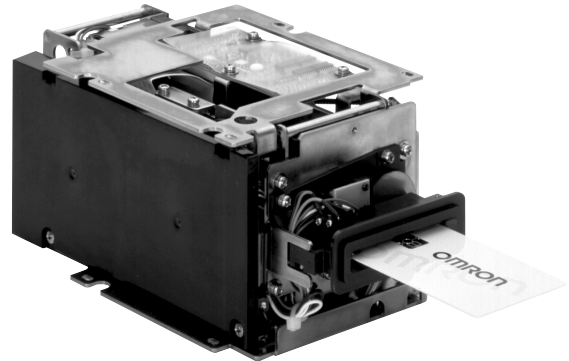


### Reliably Handles Read/Write Functions for both Magnetic and IC Cards

- Downloadable firmware for specification updates, customer requirements, firmware updates, new smart card support
- Powerful all-roller card feeding system easily handles warped and/or wet cards
- Highly reliable reading/writing of all three tracks using new pick-up encoder technology
- Fully-integrated RS-232C eliminates the need for IC adapter boards
- User-friendly interface with multifunction commands and support for T=0 and T=1, EMV
- Compact size and light weight for easy installation
- Locking shutter for fraud prevention



### Ordering Information

Magnetic Tracks Supported (R, R/W)					IC Contact	Interface (see note 3)	Built-in Shutter	Card Ejection	Color	Notes	Part Number (see note 2)
1	2	3	Center	JIS II							
R/W	R/W	R/W	—	—	No	RS-232	Yes	Front/Rear	Black	—	<b>3S4YR-MVFW1D-052</b>
R/W	R/W	R/W	—	—	ISO 7816	RS-232	Yes	Front/Rear	Black	—	<b>3S4YR-MVFW1JD-051L</b>
R/W	R/W	R/W	—	—	ISO 7816	RS-232	Yes	Front/Rear	Black	Memory card support (see note1)	<b>3S4YR-MVFW1JD-M51L</b>
R/W	R/W	R/W	—	—	ISO 7816	RS-232	Yes	Front/Rear	Black	HiCo	<b>3S4YR-MVFW1JDH-074</b>
R/W	R/W	R/W	—	—	No	RS-232	Yes	Front/Rear	Black	—	<b>3S4YR-MVS1D (MVFW1D-052 Core)</b>
R/W	R/W	R/W	—	—	ISO 7816	RS-232	Yes	Front/Rear	Black	Housing	<b>3S4YR-MVS1JD (MVFW1JD-051L Core)</b>

Note 1: Inquire regarding specific memory card support.

2: Models with support for SAM modules are available. Please contact Omron for details.

3: Please contact Omron for details concerning USB interface availability.

### ■ TYPICAL APPLICATIONS

- Cash Dispensers
- Credit Card Checkers
- Medical Patient System
- Front desk card encoders
- Automatic Teller Machines (ATM)
- ID Card Checkers
- Health Control System
- POS Terminals
- Electronic Lock System
- Teller Terminal

# Specifications

Part number		3S4YR-MVF	3S4YR-MVS
Recommended card type	Magnetic card	ISO 7810, 7811/1-5, 7812, 7813. Please inquire if using high-coercivity cards.	
	IC card (see Note 1)	ISO 7816/1-4 (T=0 and/or T=1)	
Recording method		FM decoding (F2F)	
Card feeding speed		20 cm/sec (8 in/sec) in normal operation; 5 cm/sec (2 in/sec) IC card handling	
Location of magnetic stripe		Installation	At bottom
Motor type		DC motor	
Service life (see note 2)	Entire unit	1,500,000 passes or 5 years, whichever comes first	
	IC contact	300,000 times	
Operating power supply		24 VDC ± 10%	100 VAC to 240 VAC (± 10%)
Current consumption		2.0 A or less when motor revolution starts; 500 mA in standby mode	
Mounting location		Indoors — away from wind, rain, and sunlight	
Ambient temperature	Operation	5° to 55°C (41° to 131°F)	0° to 40° C (32° to 104°F)
	Storage	-25° to 55°C (-13° to 131°F)	-25° to 55° C (-13° to 131°F)
Ambient humidity	Operation	5% to 85% RH, no condensation	35% to 85% RH, no condensation (see note 3)
	Storage	5% to 90% RH, no condensation	5% to 90% RH, no condensation (see note 3)
Vibration		10 to 150 Hz and single vibration width of 0.15 mm or an acceleration of 2 G (19.6 m/sec <sup>2</sup> ), whichever is smaller	
Shock		20 G in six directions (up and down, left and right, forward and back, 3 times in each direction)	
Dimensions (with shutter)		210L x 124W x 90H mm (8.27L x 4.88W x 3.54H in)	271L x 130W x 154H mm (10.67L x 5.12W x 6.06H in)
Weight		Approx. 2 kg (4.41 lbs)	Approx. 4.5 kg (9.92 lbs.) without attachment

- Note 1: Please request confirmation on specific IC card compatibility, including EMV (Europay / Mastercard / Visa) and memory cards.  
 2: One pass denotes one round trip.  
 3: Absolute air humidity in operation is 23 g/m<sup>3</sup> or less. In storage, absolute air humidity is 40 g/m<sup>3</sup> or less.

# Engineering Data

## I/O INFORMATION

RS-232C Interface automatically recognizes data transmission speeds of 1200, 2400, 4800, 9600, and 19200 baud.

### 3S4YR-MVFW1JD RS-232C Interface

Card reader side:  
 JAE 9-pin D-Sub socket, DELC-J9SAF-10L9.

Pin #	Signal	Input/Output	Description
1	NC	—	Not connected
2	RXD	Input	Receive data
3	TXD	Output	Transmit data
4	DTR	Output	Data terminal ready
5	GND	—	Ground
6	NC	—	Not connected
7	NC	—	Not connected
8	CTS	Input	Clear to send
9	NC	—	Not connected

### 3S4YR-MVFW1JD Power Interface

Card reader side:  
 Molex 4 node, 2.54 mm pitch in serial 5046-04A.

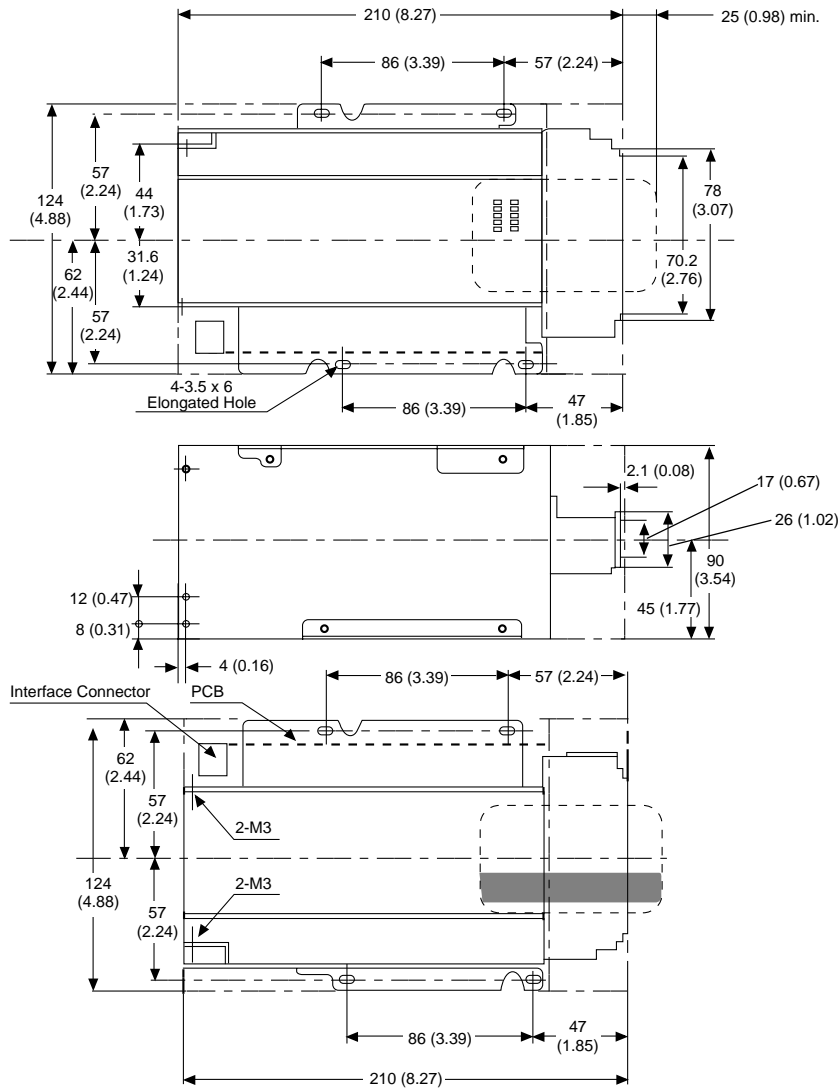
Pin #	Signal	Input/Output	Description
1	+24V	—	Power supply
2	GND	—	Power ground
3	XGND	—	Secondary power ground
4	X24V	—	Secondary supply

# Dimensions

Unit: mm (inch)

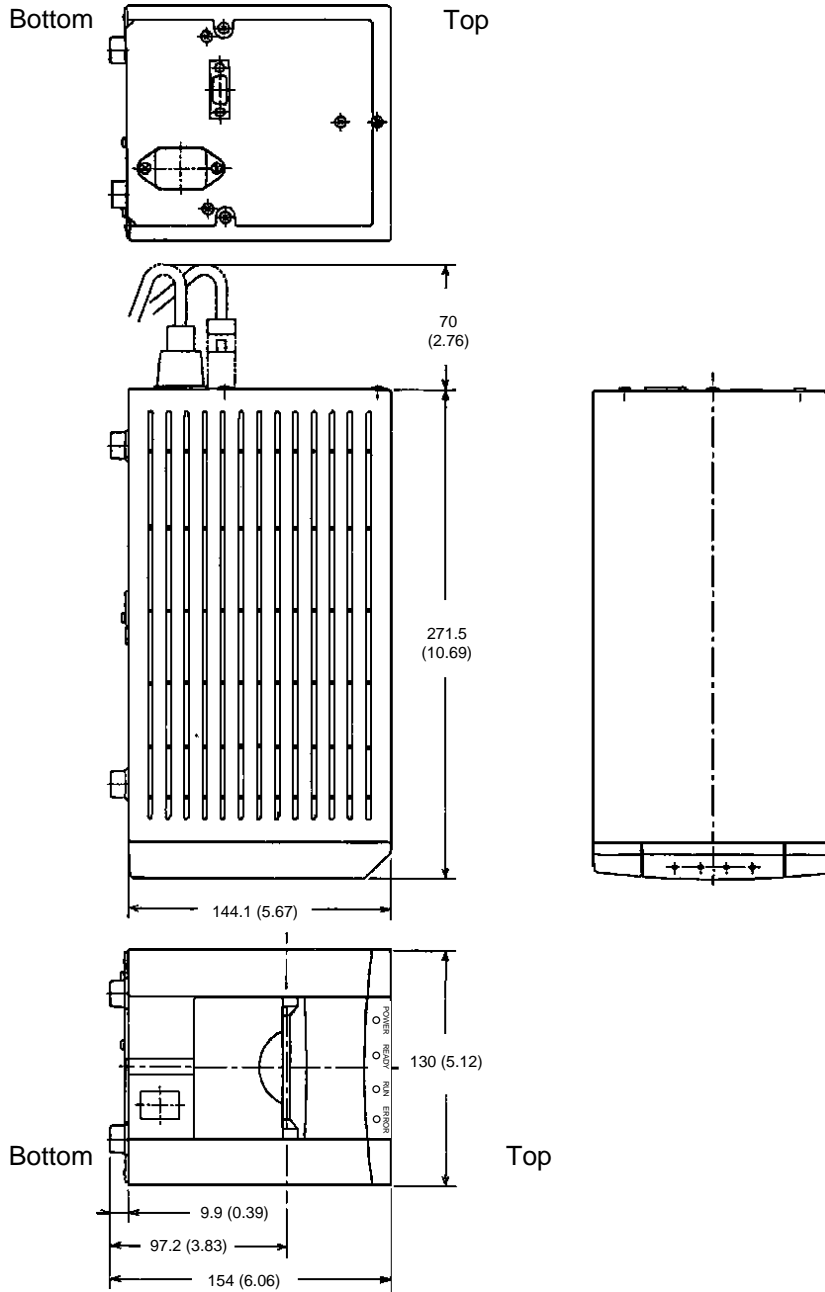
## ■ 3S4YR-MVF with shutter

(Also available without shutter.)



■ 3S4YR-MVS

Unit: mm (inch)



**NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.**

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