



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

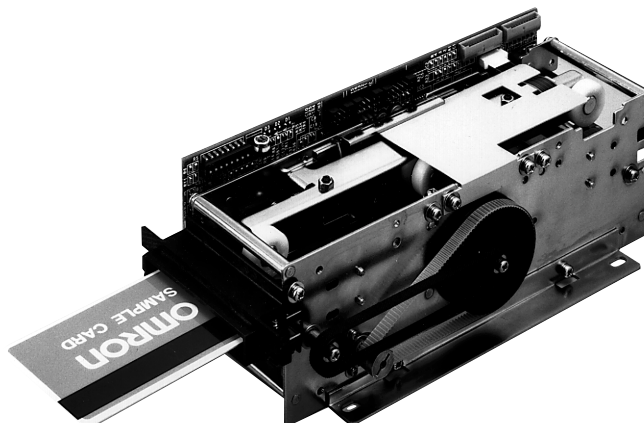
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Reliable Reader/Writer Handles Magnetic Cards

- Single, triple, or center track read/write capability
- Compact size and light weight ease installation in any terminal
- User-selectable bit recording densities of 75 bpi, 105 bpi, 150 bpi, and 210 bpi
- HiCo write capability available
- Adjustable to card thicknesses of 0.20 mm, 0.40 mm, or 0.76 mm (PET, paper, or PVC cards)
- RS-232C or TTL-compatible interface



Ordering Information

Magnetic Tracks Supported (R, R/W)					IC Contact	Voltage	Interface	Cover	Cable	Color	Part Number <small>(See note 1)</small>
1	2	3	Center	JIS II							
R/W	R/W	R/W	—	—	No	24	TTL	No	No	Black	3S4YR-MMW1
R/W	R/W	R/W	—	—	No	12	TTL	No	No	Black	3S4YR-MMW1-101
R/W	—	—	—	—	No	24	TTL	No	No	Black	3S4YR-MMW3
R/W	—	—	—	—	No	12	TTL	No	No	Black	3S4YR-MMW3-101
—	R/W	—	—	—	No	24	TTL	No	No	Black	3S4YR-MMW4
—	R/W	—	—	—	No	12	TTL	No	No	Black	3S4YR-MMW4-101
—	R/W	—	—	—	No	24	TTL	No	No	Black	3S4YR-MMW4HT <small>(See notes 2 & 3)</small>
—	—	R/W	—	—	No	24	TTL	No	No	Black	3S4YR-MMW5
—	R/W	—	—	—	No	24	RS-232C	No	No	Black	3S4YR-MMF4
—	R/W	—	—	—	No	24	TTL	No	No	Black	3S4YR-MMF4-HT <small>(See note 2)</small>
—	—	—	R/W	—	No	24	TTL	No	No	Black	3S4YR-MZW9T
—	—	—	R/W	—	No	24	TTL	No	No	Black	3S4YR-MZW9HT <small>(See notes 2 & 3)</small>
—	—	—	R/W	—	No	24	RS-232C	No	No	Black	3S4YR-MZF9T4 <small>(See note 3)</small>
—	—	—	R/W	—	No	24	TTL	No	No	Black	3S4YR-MZW99T <small>(See note 4)</small>

Note 1: Contact your Omron representative for other configurations.

2: Models capable of writing HiCo cards. All models can read HiCo cards.

3: Configured at factory for thin cards (0.40 mm).

4: Dual head allows insertion of card in any orientation.

■ TYPICAL APPLICATIONS

- Access Control
- ID Card Checkers
- Public Transportation Systems
- Closed Systems
- Electronic Lock Systems
- Parking Systems
- Vending Machines
- Automatic gate machines
- Customer loyalty schemes
- Ticket machines

■ ACCESSORIES

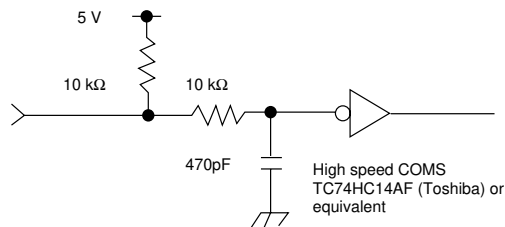
Description	Part Number
Shutter for MMW	SHUTTER MMW

Specifications

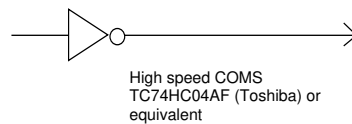
Part number	3S4YR-MMW, MMF, MZW	
Recommended card type	Magnetic card	ISO 7810-7813, JIS X6301/6302 for center stripe
Recording method	FM decoding (F2F)	
Recording density	User selectable 75 DPI, 105 DPI, 150 DPI, or 210 BPI	
Card feeding speed	30 cm/sec ± 10% (11.8 in/sec)	
Service life	500,000 passes	
Operating power supply	24 VDC ± 10% or 12 VDC ± 10% (depending on mode)	
Current consumption	1.5 A max.	
Motor type	DC motor	
Mounting location	Indoors	
Ambient temperature	Operation	0° to 45°C (32° to 113°F)
	Storage	-15° to 60°C (5° to 140°F)
Ambient humidity	Operation	30% to 85% RH without condensation
	Storage	20% to 90% RH without condensation
Vibration	10 to 150 Hz, 0.15 mm, for 8 minutes in X, Y, and Z directions	
Shock	200 m/sec ² (20 G) in each of X, Y, and Z directions	
Dimensions	211L x 90W x 65H mm (8.31L x 3.54W x 2.56H in)	
Weight	Approx. 850 g (1.87 lbs) when fully equipped	

Engineering Data

■ INPUT CIRCUIT DIAGRAM



■ OUTPUT CIRCUIT DIAGRAM



■ I/O INFORMATION

3S4YR-MMW1 (TTL) Interface Connector

MMW1 connectors (34 pin)

Hirose HIF3BA-34PA-2.54DS (male) for card reader side.

Hirose HIF3BA-34D-2.54R (female) for the cable side.

Pin #	Signal	Input/Output	Pin #	Signal	Input/Output
1	+24 V	—	18	MRS	Input
2	+24 V	—	19	$\overline{S1}$	Output
3	+24 V	—	20	$\overline{S2}$	Output
4	+24 V	—	21	$\overline{S3}$	Output
5	0 V	—	22	$\overline{S4}$	Output
6	0 V	—	23	$\overline{RCP2}$	Output
7	0 V	—	24	$\overline{RCP3}$	Output
8	0 V	—	25	$\overline{RDP2}$	Output
9	\overline{RCP}	Output	26	$\overline{RDP3}$	Output
10	\overline{RDT}	Output	27	$\overline{WDT2}$	Input
11	\overline{WCP}	Output	28	$\overline{WDT3}$	Input
12	\overline{FGP}	Output	29	$\overline{WCP2}$	Output
13	\overline{WDT}	Input	30	—	—
14	\overline{CONT}	Input	31	—	—
15	$\overline{CONT2}$	Input	32	—	—
16	$\overline{CONT3}$	Input	33	—	—
17	\overline{MFS}	Input	34	—	—

3S4YR-MMW3,4,5 (TTL) Interface Connector

MMW other connectors (26 pin)

Hirose HIF3BA-26PA-2.54DS (male) for card reader side.

Hirose HIF3BA-26D-2.54R (female) for the cable side.

Pin #	Signal	Input/Output	Pin #	Signal	Input/Output
1	24 V	—	14	\overline{CONT}	Input
2	24 V	—	15	—	—
3	24 V	—	16	—	—
4	24 V	—	17	\overline{MFS}	Input
5	0 V	—	18	\overline{MRS}	Input
6	0 V	—	19	$\overline{S1}$	Output
7	0 V	—	20	—	—
8	0 V	—	21	$\overline{S3}$	Output
9	\overline{RCP}	Output	22	$\overline{S4}$	Output
10	\overline{RDT}	Output	23	—	—
11	\overline{WCP}	Output	24	—	—
12	\overline{FGP}	Output	25	—	—
13	\overline{WDT}	Input	26	—	—

3S4YR-MMF4 RS-232C Interface Connector

MMF4 connectors (34 pin)

3M 3431-6002LCSC for card reader/writer side.

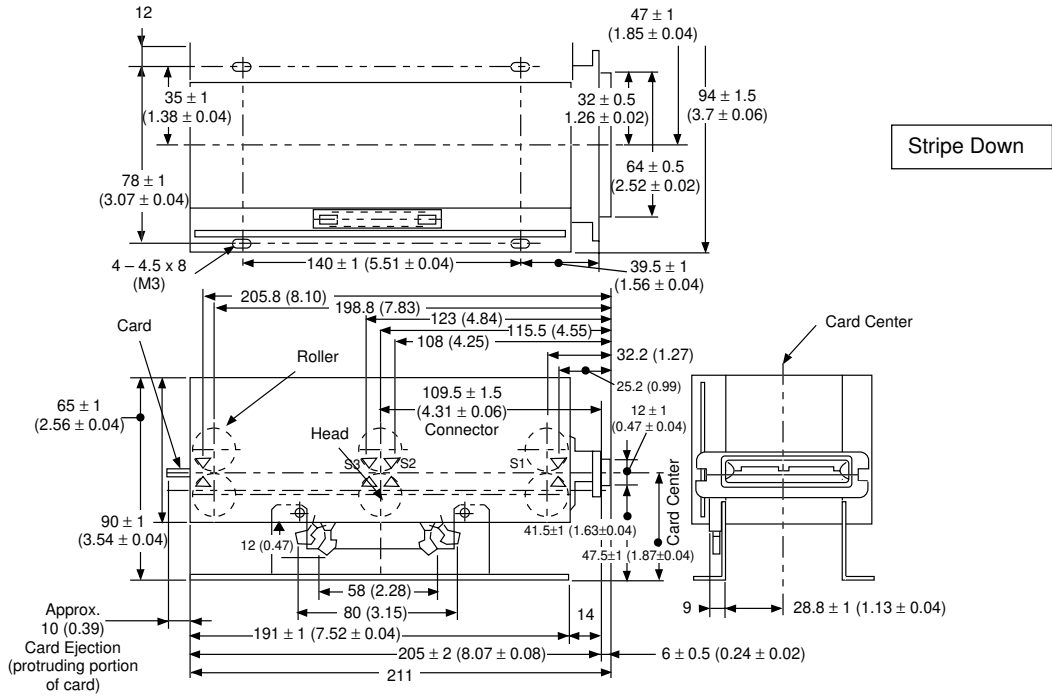
3M 3414-6500SC or 3M 3448-3034J for the cable side.

Pin #	Signal	Input/Output	Pin #	Signal	Input/Output
1	FG	—	18	SG	Input
2	FG	—	19	DSR	Input
3	POV	—	20	CTS	Input
4	POV	—	21	RXD	Input
5	POV	—	22	DTR	Output
6	+ 24 V	—	23	RTS	Output
7	+24 V	—	24	TXD	Output
8	+24 V	—	25	—	—
9	0 V	—	26	—	—
10	0 V	—	27	BZ	Output
11	+5 V	—	28	+24 V	—
12	+5 V	—	29	+5 V	—
13	—	—	30	0 V	—
14	—	—	31	LED3	Output
15	FG	—	32	LED2	Output
16	FG	—	33	LED1	Output
17	SG	—	34	+5 V	—

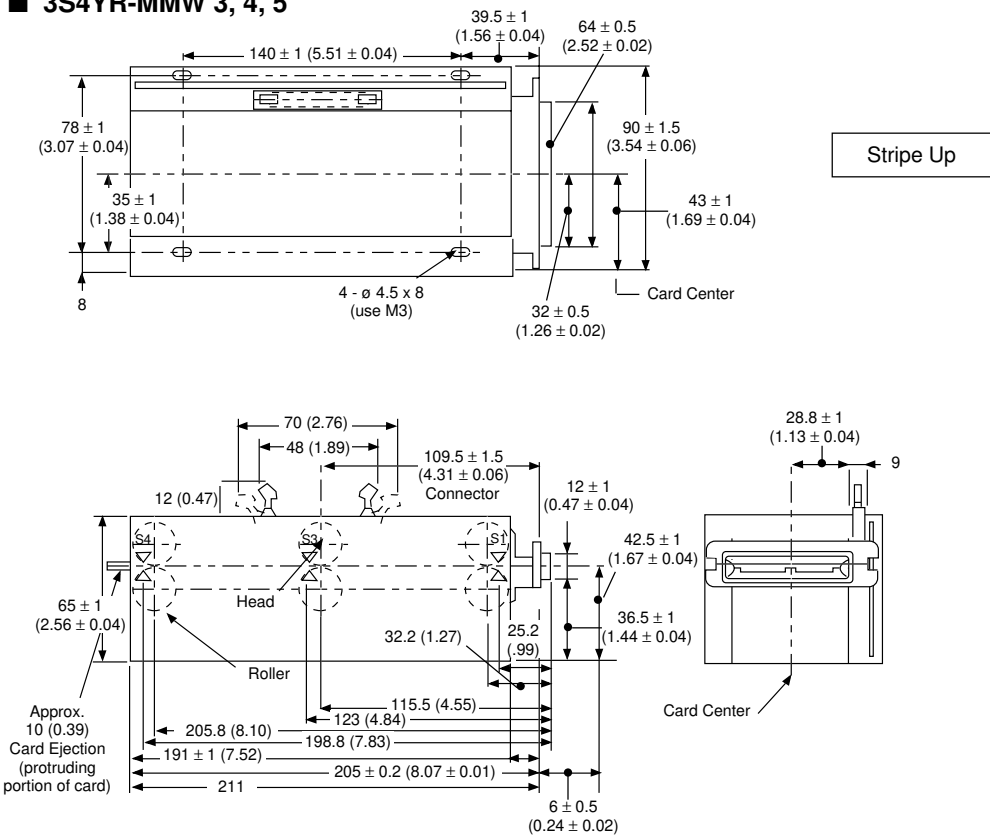
Dimensions

Unit: mm (inch)

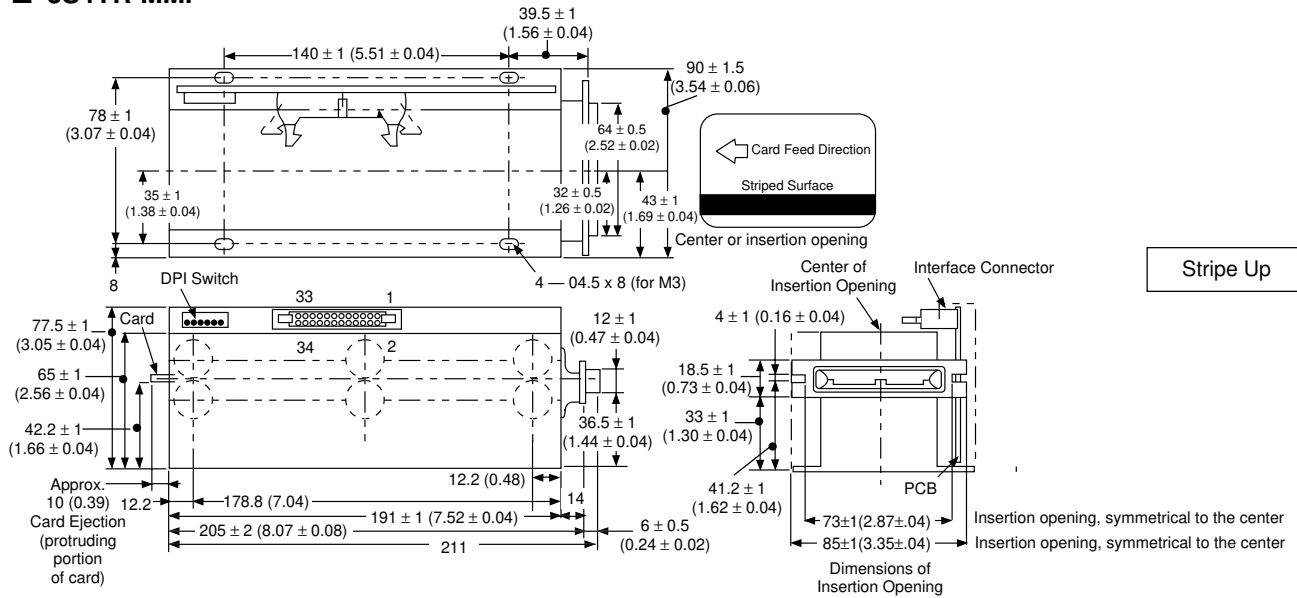
■ 3S4YR-MMW1



■ 3S4YR-MMW 3, 4, 5



■ 3S4YR-MMF



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

OMRON

OMRON ELECTRONICS, INC
One East Commerce Drive
Schaumburg, IL 60173
1-800-55-OMRON

OMRON CANADA, INC.
885 Milner Avenue
Scarborough, Ontario M1B 5V8
416-286-6465