

## ShadowProx Readers



The **SH-Y1**, **SH-Y2** & **SH-Y4** proximity readers are the next generation of the popular **ShadowProx™** line of proximity readers, cards, and tags. Sleek and contemporary styling allows for installation in the most prestigious locations. Following the practical tradition of the **ShadowProx™** line, these units are mountable on door mullions (SH-Y1), on walls, on single gang electrical boxes (SH-Y2) or on a single or double gang electrical box, as well as any flat surface (SH-Y4). For added style and convenience, they are more compact and will enhance both the interior and exterior decor of any professional environment.

The **ShadowProx™ SH-Y1**, **SH-Y2** and **SH-Y4** reader electronics modules are fully enclosed in an epoxy potting, making them both vandal proof and weather resistant. An additional, unique feature is that both models **SH-Y1** & **SH-Y2** have the same potted electronics module, allowing for interchangeable bezels.

## Features

- Proximity technology
- Single piece construction
- Potted electronics
- Compact modular design
- Easy installation
- Mounts on standard mullion (SH-Y1)
- Mounts on metal single gang box (SH-Y2/Y4)
- Indoor / Outdoor operation
- Built-in buzzer

The **ShadowProx™** proximity readers (SH-Y1, SH-Y2 & SH-Y4) are offered with read ranges of up to 30.5 cm (12"). The readers recognize over 137 billion unique codes. Using the **ShadowProx™** family (Kantech Secure Format) provides increased security and guarantees against duplication of cards.

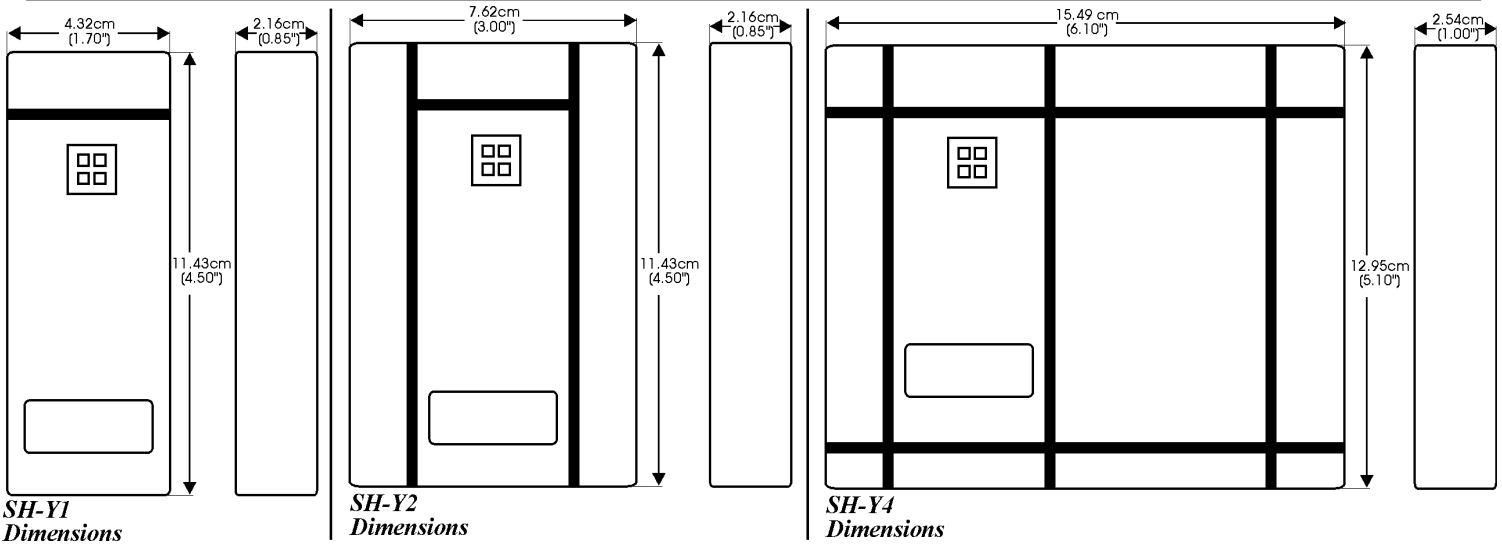


Made for Kantech by  
proximity technology pioneer  
**MOTOROLA**

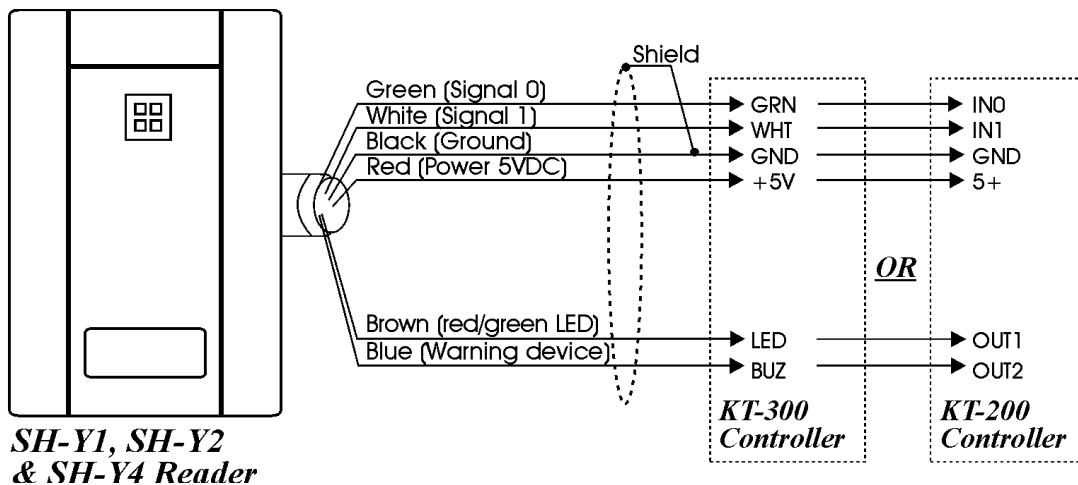
# Technical Specifications

	<b>SH-Y1</b>	<b>SH-Y2</b>	<b>SH-Y4</b>
<b>Maximum read range</b> .....	Up to 12.7 cm (5 inches)	Up to 12.7 cm (5 inches)	Up to 30.5 cm (12 inches)
<b>Bezel size metric cm (H,W,T)</b> .....	11.43 x 4.32 x 2.16	11.43 x 7.62 x 2.16	15.49 x 12.95 x 2.54
<b>Bezel size inches (H,W,T)</b> .....	4.50 x 1.70 x 0.85	4.50 x 3.00 x 0.85	6.10 x 5.10 x 1.00
<b>Electronics module size metric cm</b> .....	10.80 x 3.80 x 1.80	10.80 x 3.80 x 1.80	12.19 x 14.73 x 2.03
<b>Electronics module size inches</b> .....	4.27 x 1.51 x 0.72	4.27 x 1.51 x 0.72	4.80 x 5.80 x 0.80
<b>Weight</b> .....	142g (5 oz)	142g (5 oz)	397g (14 oz)
<b>Color</b> .....	Black	Black	Black
<b>LED indicator</b> .....	Tri-color (red, green, amber)	Tri-color (red, green, amber)	Tri-color (red, green, amber)
<b>Kantech reader type</b> .....	Reader Type 13 (ShadowProx)	Reader Type 13 (ShadowProx)	Reader Type 13 (ShadowProx)
<b>Output</b> .....	Kantech Secure Format (KSF)	Kantech Secure Format (KSF)	Kantech Secure Format (KSF)
<b>Frequency</b> .....	125kHz (excitation), 62.5 kHz (return)	125kHz (excitation), 62.5 kHz (return)	125kHz (excitation), 62.5 kHz (return)
<b>Indoor/outdoor</b> .....	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor
<b>Input power</b> .....	4 to 16 volts DC at the reader	4 to 16 volts DC at the reader	4 to 16 volts DC at the reader
<b>Power source</b> .....	Kantech controller	Kantech controller	Kantech controller
<b>Current (typical) off metal</b> .....	86mA @ 5V	86mA @ 5V	70mA @ 5V
<b>Current (typical) metal gang box</b> .....	97mA @ 5V	97mA @ 5V	65mA @ 5V
<b>Cabling</b> .....	6 Conductor, #18AWG, shielded Belden ref #9553	6 Conductor, #18AWG, shielded Belden ref #9553	6 Conductor, #18AWG, shielded Belden ref #9553
<b>Maximum distance from controller</b> .....	150m (500 feet)	150m (500 feet)	150m (500 feet)
<b>Operating temperatures</b> .....	-35°C to 65°C (-30°F to 150°F)	-35°C to 65°C (-30°F to 150°F)	-35°C to 65°C (-30°F to 150°F)
<b>Mounts on metal</b> .....	Yes	Yes	Yes
<b>Certifications</b> .....	UL294, CE	UL294, CE	UL294, CE

**Compatible cards : SH-C1; SH-K1; SH-CMG1; SH-CMG2; SH-CMG3; SH-CMG4.**



## Wiring Diagram



DN1389-0106