



# FS700

IP65 CCD Fixed mount scanner

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## Introduction

The FS700 is equipped with ultra-compact high performance CCD imager bar code scanning engine, ideal for OEM applications in devices including POS, medical devices, kiosks, lottery terminals and access control devices, a stand option can be ordered to facilitate desktop hand-free reading options.

Performance : Its auto-shuttle-emulation-like smart detection, offers superior decoding performance on a reading speed up to 500 scans per second and up to 500mm reading depth for the majority of 1D bar codes and GS1 DataBar™ codes. A stand option can be ordered to facilitate hand-free "continuous mode" reading options.

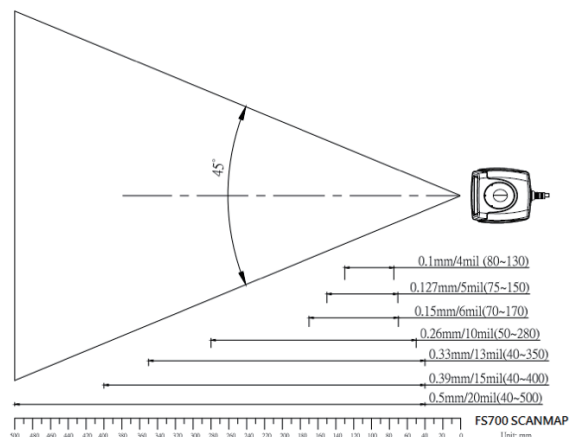
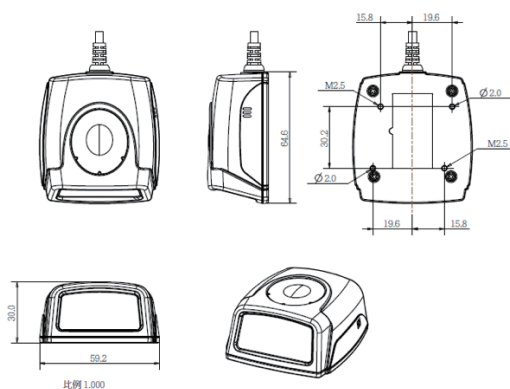
Everything has been done to simplify the integration of the FS700, compact size, multiple mounting possibilities and multiple interfaces selection, such as standard RS232 & USB-HID and USB Virtual COM port.

With its built-in automatically turn off reading and switch on reading as it sense a bar code moving in front of it, can extend its lifespan. its 100,000 LUX ambient light resistance, hand-on software-programming function, this FS700 is the best choice ever for various fixed mount/build in OEM bar code scanning application.

## Features

- Easily integrated with various OEM applications.
- Fixed mount linear imager bar code scanner which offers superior 1D scanning.
- Compact and lightweight design is flexible for external application requirement.
- Read major 1D bar codes,GS1 Databar linear and stacked bar codes.
- Support automatic detection and wake up reading mode.
- Reading depth is up to 500mm (20mil/0.5mm@code39 pcs90%).
- Smart Detection, speed up to 500 scans per second.
- Rugged casing that supports IP65 Dropping from 1.8m.

# FS700



## Specification

### Physical Characteristics

Weight	
Body weight	Approx. 108 g
Cable weight(USB)	Approx. 40 g
Material	
	Polycarbonate
Cable Length	
	5FT. ( 150cm )
Dimension	
	59.2 mm W x 64.6 mm D x 30.0 mm H

### Performance

Light Source	Visible Red light 632nm LED
Sensor	Linear CCD Sensor
Processor Type	ARM 32-bit CPU
Operating Freq.	8 MHz (Internal)
Scan Rate	Smart detection, up to 500 scans per second $\pm 10\%$
Reading Distance	Up to 500mm@20mil/0.5mm PCS90%, Code39
Print Contrast Ratio	30%
Resolution	4mil/0.1mm@PCS90%
Reading Angle	Test Conditions: Code 39, 10mil/0.25mm, PCS90%
Forward & Backward	$\pm 10^\circ \sim 65^\circ (\pm 5^\circ)$
Left & Right	$\pm 60^\circ (\pm 5^\circ)$
Ambient Light	100,000 Lux Max. @ Direct sun light

### Environmental

Operating Temperature	0 °C to 50 °C (32 °F to 122 °F)
Storage Temperature	-20 °C to 70 °C (-4 °F to 158 °F)
Relative Humidity	20% to 95% (Non-condensing)
Sealing	Designed to IP65 water and dust protection

### Electrical Characteristics

Interface	RS232	USB
Input Voltage	DC +5V $\pm 5\%$	DC +5V $\pm 5\%$
Output Voltage (Typ.)	$\pm 9V$	+5V $\pm 10\%$
Output low Voltage (Max.)	-	0.7V
Current Draw		
Power On (Typ.)	170 mA	170 mA
Stand by (Typ.)	50 mA	50 mA
Operation (Typ.)	150 mA	150 mA

### Reliability

Life Time	
Trigger Switch	1,000,000 times
MTBF(Calculated)	50,000 hours
Thermal Shock	
High Temp.	60 °C (140 °F)
Low Temp.	-20 °C (-4 °F)
Cycle time	30 minutes for high temp., 30 minutes for low temp.
Cycles	24 cycles
Cable Bending Test	25,000 times minimum (30 times/min @ 500g/90 °)
Drop	70.87 inches (180cm) drop on concrete 6 surface

### Readable Symbolologies

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	
Code 39	V	V
Code 39 Full ASCII	V	
Code32 / Italian Pharmacy	V	
Code 128	V	V
CODABAR/NW7	V	V
Interleave 25	V	V
Industrial 25	V	
Matrix 25	V	
MSI/PLESSEY	V	
Telepen	V	
Code 93	V	
China Postage	V	
GS1 DataBar Omnidirectional & Stacked	V	
GS1 DataBar Limited	V	
GS1 DataBar Expanded & Stacked	V	

Due to ChampTek's / Scantech ID's continuing product improvement programs, specifications and features are subject to change