FMT
FMT Corporation Co., Ltd.

100% GUARANTEED — CUSTOMER SATISFACTION

1 YEAR WARRANTY

FM-120S
2D Barcode Scanner

2D | CMOS | TTL232 | USB

Features

◼ **UIMG® Technology**

Newland's sixth-generation **UIMG®** technology gives the scan engine an edge with unrivaled decoding capabilities on 1D & 2D barcodes.
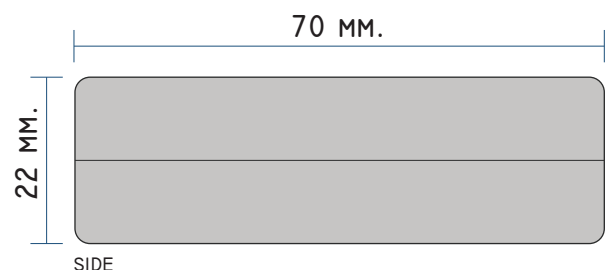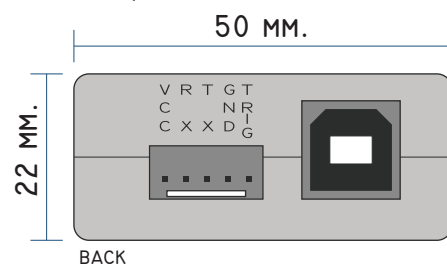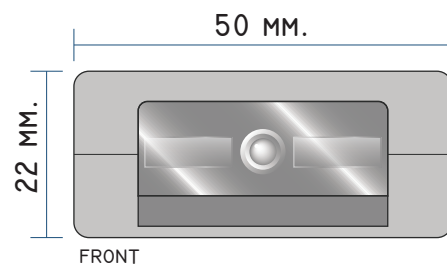
◼ **Multiple Interfaces**

The FM-120S supports USB and TTL-232 interfaces to meet diverse customer needs.

◼ **Compact & Lightweight Design**

Seamless integration of imager and decoder board makes the scan engine extremely small and lightweight and easy to fit into miniature equipment.

◼ **Outstanding Power Efficiency**

The advanced **NLDC** technology incorporated in the scan engine helps reduce its power consumption and prolong its service life.

50 MM.
22 MM.
FRONT

50 MM.
22 MM.
V R T G T
C   N R I
C X X D I G
BACK

70 MM.
22 MM.
SIDE

Tolerance ± 2 MM.

Application Scenearios

Designed for OEM applications, This high performance CMOS scan engine can easily be integrated into various solutions such as kiosks, ticketing machine, PDA's and many more.

FM-120S
2D Barcode Scanner

OEM Scan Engine

Performance	Image Sensor		640×480 CMOS
	Illumination		White LED
	Aimer		Red LED (650 nm±10 nm)
	Symbologies	2D	PDF417, QR Code (QR1/2, Micro), Data Matrix (ECC200, ECC000, 050, 080, 100, 140), Chinese Sensible Code
		1D	Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6, ITF-14, ISBN, Code 93, UCC/EAN-128, GS1 Databar, Matrix 2 of 5, Code 11, Industrial 2 of 5, Standard 2 of 5, Plessey, MSI-Plessey, etc.
	Resolution*		≥5mil
	Typical Depth of Field*	EAN-13	60mm-230mm (13mil)
		Code 39	55mm-125mm (5mil)
		QR Code	40mm-120mm (15mil)
	Min. Symbol Contrast*		25%
	Scan Angle**		Roll: 360°, Pitch: ±45°, Skew: ±40°
	Field of View		Horizontal 45.6°, Vertical 34.2°
Mechanical/ Electrical	Interface		TTL-232, USB (HID Keyboard, COM Port Emulation, HID-POS)
	Operating Voltage		3.3VDC±5%
	Rated Power Consumption		480mW
	Current@3.3VDC	Operating	145±15mA
		Standby	<11mA
		Sleep	<200uA
	Scan engine dimensions		21.5(W)×15.3(D)×11.8(H)mm (max.)
	Weight		3.6±0.2g
Environmental	Operating Temperature		-20℃ to 50℃ (-4°F to 122°F)
	Storage Temperature		-40℃ to 70℃ (-40°F to 158°F)
	Humidity		5% to 95% (non-condensing)
	Ambient Light		0~100,000lux (natural light)
Certifications	* Remark : Scan engine inside		FCC Part15 Class B, CE EMC Class B
Accessories	NLS-EVK		Software development board for the NLS-EM3085-M, equipped with a trigger button, beeper and RS-232 & USB interfaces.
	Cable	USB	Used to connect the NLS-EVK to a host device.
		RS-232	Used to connect the NLS-EVK to a host device.