



FM3281 Grouper

Fixed-Mount Scanners



1D & 2D



Advanced
Scripting



CMOS



Dual
Interface



EasySet



IP67



Mobile
Reading



NFC



Visual
Feedback



Warranty
5 Years



Features

A True Outdoor Solution

An IP67-rated seal renders the FM3281 Grouper impervious to dust, water, and other contaminants. The high sealing ensures that transitioning from cold to hot temperatures won't cause condensation that prevents reading the barcodes. With minimized glare and reflection, the FM3281 Grouper is the best choice for reading codes even in the brightest sun conditions, making it the ultimate fixed-mount reader for outdoor applications.

24/7 Feedback

The FM3281 Grouper can provide ongoing status updates to the host, ensuring solution providers with remote applications can guarantee the scanner's operational status and receive timely alerts regarding any potential issues before customers attempt to use it.

Advanced Barcode and OCR Reading

Armed with Newland's sixth-generation technology, the FM3281 Grouper excels at reading onscreen barcodes containing large amounts of data. With its Megapixel technology, this fixed-mount scanner is also perfect for OCR reading applications like ID cards.

IR & Light Triggers for Precise Data Capture

By combining IR and light sensors, the FM3281 Grouper achieves higher sensitivity to activate the scanner to capture barcodes as they are presented. This leads to higher throughput and productivity. The infrared sensor is particularly useful for remote applications with low ambient light conditions, enabling the scanner to read the code even if there are no discernible changes in light.

Full NFC Functionality

One version of the FM3281 Grouper offers excellent barcode and OCR scanning capabilities, as well as full NFC functionality. This versatile scanner supports both contactless RFID cards and barcodes, and, when authorized, can be used for payment solutions.

Extra Protocols for Additional Applications

The FM3281 Grouper offers additional communication protocols, including Wiegand and RS485. Wiegand is most suitable for secure access control solutions, while RS485 is an ideal choice for longer cabling or when multiple devices run in parallel over a wider area, as is often the case in industrial settings.

**5 Years Full
Warranty**

EasySet

FM3281 Grouper

Data Capture

1D	All major 1D symbologies
2D	All major 2D symbologies
Depth of Field Code 128 (10mil)	0 mm - 280 mm
Depth of Field Code 39 (20mil)	15 mm - 310 mm
Depth of Field EAN 13 (13mil)	0 mm - 290 mm
Depth of Field QR (20mil)	0 mm - 270 mm
Field of View Horizontal	58.2°
Field of View Vertical	66°
Illumination	White LED (3000K)
Image Sensor	1280 x 1088 CMOS
Minimal Print Contrast	25%
OCR	Passport OCR, ID Cards, Travel Permit OCR
Resolution	≥3mil
Scan Angle Pitch	±60°
Scan Angle Roll	360°
Scan Angle Skew	±60°

Physical

Current @ 5VDC Operating	NFC version: 220 mA, Non NFC version: 172 mA
Current @ 5VDC Standby	NFC version: 175 mA, Non NFC version: 118 mA
Dimensions	78.7(W) × 47.7(D) × 67.7(H) mm (max.)
Input Voltage	5-24 VDC ±5%
Interfaces	RS-232, USB, RS-485, Wiegand
Notifications	Beep

Wireless

NFC: Reading Distance	0 mm - 30 mm
NFC: Supported Functions	Supports reading card number and card type, reading and writing sectors, file operations, key operations, contactless CPU card operation (ISO14443 Type A) and APDU.
NFC: Supported Standards	ID card, NFC-equipped phone, Mifare one (M1), S50, S70, Mifare plus, Mifare plus Evx, Mifare Ultralight/C/EV1, Mifare Desfire, CPU card, NTAG2x series, NTAG42x series, ICODE 2, Type B card, Felica card

Environmental

Electro Static Discharge (ESD)	±15 kV (air discharge), ±8 kV (direct discharge)
Humidity	5% to 95% (non-condensing)
IP Rating	IP67
Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)

Software

Configuration Tools	EasySet
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Certifications	
Certifications Hardware	FCC Part15 Class B, CE EMC Class B, RoHS
Warranty	
Warranty Standard	5 Years
Accessories	
Accessories Optional	Multiplug adapter, RS-232 cable, USB cable, USB-C cable, RS-485-Wiegand cable
Accessories Standard	USB cable, RS-232 cable, RS-485 to Wiegand adapter
What's in the box?	
NLS-FM3281-NFC-20	FM3281 Grouper, 2 meter USB extension cable
NLS-FM3281-NFC-28	FM3281 Grouper, 2 meter RS-232 extension cable, Multiplug adapter

Accessories

Charging/Power	ADP100 Power Supply for HR, FR, and FM Series (ADP100)
Cables	CBL-0233R RJ50 to Screw Connector Cable (CBL-0233R) CBL017U RJ to USB-C Cable for HR, FR and FM Series (CBL017U) CBL026U USB Cable for FR and FM series (CBL026U) CBL030UA USB Cable for HR, FM, and FR (CBL030UA) CBL036UA USB Cable for HR, FM, and FR Series (CBL036UA) CBL037R RS232 Cable for HR, FR, and FM Series (CBL037R) CBL042UA USB Cable for HR, FM, and FR Series (CBL042UA) CBL042UA V5.0 USB Cable for FM, and FR Series (CBL042UA V5.0)
Peripherals	EX232 Remora (NLS-EX232-01)