

# Datasheet

## Nexus MIFARE readers with EST Technology (M, MK, MO, MKO) Nexus Prox readers with EST Technology (P, PK)

**DAT8020-EN**  
Nexus readers: 802-002-1xx0  
(MIFARE and Prox)



Nexus M, MO, P



Nexus MK, MKO, PK

Technical data													
Supply voltage	Min 9V DC – Max 24V DC												
Typical supply current	From 72mA at 14V DC, 1W Reader with keypad: 180mA at 14V DC, 2.5 W												
Peak current	150mA at 14V DV, 2.1W Reader with keypad: 200mA at 14V DC, 2.8 W												
Communications	RS485 port, using MODBUS protocol with encrypted data												
Transmit frequency	MIFARE readers: 13.56 MHz MIFARE-NFC card reader Prox readers: 125 kHz EM-Marine proximity card reader												
Operating temperature	-20°C to +70°C												
Storage temperature	-45°C to +85°C												
Wiring and cable installation													
Cable length	3 m												
Max. cable distance from central	50 m, see cable specifications for details												
Wiring:	<table border="0"> <tr> <td>Orange</td> <td>+</td> <td>9-24V DC input</td> </tr> <tr> <td>Orange/White</td> <td>-</td> <td>Ground</td> </tr> <tr> <td>Green</td> <td>RA</td> <td>RS-485 BUS</td> </tr> <tr> <td>Green/White</td> <td>RB</td> <td>RS-485 BUS</td> </tr> </table>	Orange	+	9-24V DC input	Orange/White	-	Ground	Green	RA	RS-485 BUS	Green/White	RB	RS-485 BUS
Orange	+	9-24V DC input											
Orange/White	-	Ground											
Green	RA	RS-485 BUS											
Green/White	RB	RS-485 BUS											
Features													
Keypad	Possible for Nexus MK, MKO, PK												
LED indicator	Two color: red for locked door and green for open door												
Buzzer	Short beep if access is granted and a longer error beep if otherwise. With a keypad, each key pressed you will hear a short click sound and blink of green LED												
Reading distance - ISO card	Typical 40 mm												
Reading distance - tag	Typical 20 mm (Prox: typical 30 mm)												
Anti-sabotage protection	Optical, integrated												
Possible to secure with vandal shield	Yes on Nexus M/MO/P (not on readers with keypad)												
Offline functionality	Possible with Nexus MO/MKO with the installation of a separate Nexus offline controller												
Housing													
Size	W: 54mm × H: 149mm × D: 15mm												
Recommended mounting height	130 - 160 cm												
Housing	Self-extinguishing material PC-ABS (V0)												
IP protection	IP65												
Color	Black												
Weight	165g												