



Datalogic 3138 – High-speed RFID reader for the Datalogic Memor series

-  **High-speed RFID reading at up to 1,200 tags per second**
Speeds up processes from stock-taking to goods dispatch and ensures reliable data capture even when there is a high volume of tags.
-  **RFID and barcode scanning using mobile computers from the Datalogic Memor range**
Compatible devices from the Memor 11, Memor 12/17 and Memor 30/35 series provide powerful solutions for the simultaneous capture of RFID tags and barcodes in a single step.
-  **Secure connection and flexible communication via ePop-Loq and Bluetooth**
Ensures a stable connection during intensive use, supports simultaneous charging and simplifies connection to various host systems.
-  **Designed for long shifts with a hot-swappable battery and a robust build**
The removable battery and robust housing ensure reliable performance in demanding working environments.
-  **Smart data processing for large volumes of tags**
The intelligent duplicate detection system can manage up to one million transponders without any loss of performance. In batch mode, the device stores millions of tags and barcodes along with the date and time, even without a host connection.

Features

RFID: UHF, EPC Class 1 Gen 2 v2, nominal read range up to 9 m

Barcodes: with compatible Datalogic Memor mobile computer

Communication with mobile computer: ePop-Loq connection, USB-C, Bluetooth (pairing via NFC tag)

Feedback: speaker, vibration, LED

Battery: 25.4 Wh, up to 20 hours, hot-swappable

Protection: IP54, drop-proof up to 1.2 m onto concrete

Operating temperature: -10 °C to 50 °C

Dimensions (W x L x H): 98 x 158 x 170 mm

Weight: 550 g

Optional accessories

Mounts for Datalogic Memor mobile computers

Charging station

Replacement handle

PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS	
Dimensions	158 x 98 x 170 mm (LxWxH)
Weight	550g (including Power Handle)
User input	Trigger button
User feedback	Speaker, vibration motor, LED - user configurable
Power	Rechargeable 25.4Wh, 7.3V Lithium Polymer battery pack
Minimum operating time¹	Light use ² : 20hrs Moderate use ³ : 11 hrs (preliminary estimates) Heavy use ⁴ : 6.5 hrs
Input rating	USB-C with Power Delivery (40W with ePop-Loq, 20W reader only)
Enclosure materials	Polycarbonate

¹ Tag Read/Write performance dependent on tag type, items tagged, number of tags in the field and other radio and environmental factors.

PERFORMANCE CHARACTERISTICS	
RFID engine	Custom module with embedded Impinj E710
Communication protocols	ASCII 3 parameterised command set
Security features	HID OmniKey™ Security Chip
Memory	Embedded 32GB ⁵ storage memory - store up to 500 million date and time stamped EPCs
Compatible host devices (Bluetooth®)	Any Bluetooth® Host ⁶ supporting the Serial Port Profile (SPP) or Human Interface Device (HID) profile (Android, iOS, Linux, Mac, Windows).
Compatible host devices (USB)	Any USB host with USB CDC support (Windows, Linux, Mac, Android)

ENVIRONMENTAL	
Operating temp.	-10°C to 50°C (14°F to 122°F)
Charging temp.	5°C to 40°C (41°F to 104°F)
Storage temp.	Less than 1 month at -20°C to +45°C (-4°F to 113°F). Less than 6 months at -20°C to +35°C (-4°F to 95°F).
Humidity	5% to 85% non-condensing
Drop spec	IP54; Multiple drops to concrete: 4 ft./1.2 m ambient, 3ft / 0.9m across the operating temperature range
Tumble	1000 0.5 metre tumbles at room temperature (2000 cycles)
Electrostatic Discharge (ESD)	± 15kVdc air discharge; ± 8kVdc contact discharge
MIL-STD 810F	Meets and exceeds applicable MIL-STD 810F for drop, tumble and sealing

RFID PERFORMANCE	
Standards supported	EPC Class 1 Gen 2 v2
Nominal read range⁷	Up to 9 m (29.5 ft)
Nominal write range⁷	Up to 4 m (13.1 ft)
Field	150-degree forward facing (approx.)
Antenna	Right Hand Circularly Polarised
Frequency Range	EU: 865-868MHz, 916-919MHz US: 902-928MHz
Maximum Output Power	Up to 30 dBm (region dependent) + 4.0 dBiC Antenna

COMMUNICATION	
Bluetooth	Bluetooth® v4.2 compliant (v5.1 compatible)
Bluetooth GATT Services	<ul style="list-style-type: none"> • Device Information Service • Battery Service • HID over GATT • Serial over GATT
Bluetooth frequency range:	2.4 - 2.4835 GHz
Bluetooth profiles	SPP Profile, HID Profile, Apple iAP2, Bluetooth Low Energy
Bluetooth range⁸	Up to 100m
Bluetooth pairing	Simple Secure Pairing, NFC OOB Pairing
Physical host device connection	Direct connection via ePop-Loq® cases (separate purchase)

¹ Minimum operating time figures are based on new units that have been stored, charged and operated within the stated Environmental Specifications. Units stored over 3 months must be recharged every 3 months. Number of transponders in the environment affects minimum operating time.

² Light Use: Continuous RFID inventories for 20s of every 120s

³ Moderate Use: Continuous RFID inventories for 10s of every 30s

⁴ Heavy Use: Continuous RFID inventories for 5s of every 60s

⁵ Up to 256GB microSD card storage supported. 32GB fitted as standard

⁶ Compatible Bluetooth® stack required in the Host device

⁷ Tag Read/Write performance is dependent on tag type, items tagged, number of tags in the field and other radio and environmental factors

⁸ Open field

PERIPHERALS AND ACCESSORIES	
External interface	USB-C connector or custom 8-Way Power-Pin connector (for use with docking cradle)
Power supply management	Separate purchase (see accessories PN)
Other accessories available	Adapter mounts for a variety of smartphones and handheld terminals
REGULATORY	
Regions	EU (CE), USA (FCC), Canada (see page 4 for details)
FCC ID	S6J2128
IC	8948A-2128
EMC	EN 55032: 2015+A11:2020, Class A EN 6100-3-2: 2014, Class A EN IEC 61000-3-2: 2019+A1:2021, Class A EN 61000-3-3: 2013+A1:2019+A2:2021 EN 55035: 2017+A11:2020 EN 301 489-1 V2.2.3 (2019-11) EN 301 489-3 V2.3.2 (2023-01) EN 301 489-17 V3.2.4 (2020-09) 47 CFR FCC Part 15, Subpart B, Class A ANSI C63.4-2014 ANSI C63.4a-2017 ICES-003: 2020 Issue 7, Class A ICES-Gen: 2018 Issue 1 +A1:2021 ANSI C63.4-2014 amended as per ANSI C63.4a-2017
RF	EN 302 208 V3.3.1 (2020-08) 47 CFR FCC Part 15, Subpart C (Section 15.247) ANSI C63.10-2013 Canada RSS-247 Issue 3, August 2023 Canada RSS-Gen Issue 5, Amendment 2, February 2021 ANSI C63.10-2013
RF Exposure	EN 50566:2017 EN 62209-2:2010/A1:2019 IEC 62209-2:2010/AMD1:2019 EN 50663:2017 EN 62479:2010 EN 50364:2018 EN 62369-1:2009 IEEE Std 1528:2013 KDB 865664 D01 v01r04 KDB 865664 D02 v01r02 KDB 447498 D01 v06 ISED RSS-102 Issue 5:2015/AMD1:2021 IEC/IEEE 62209-1528:2020
Electrical Safety	IEC 62368-1:2018 UL 62368-1:2019 CSA C22.2 No. 62368-1:19
Environmental	2011/65/EU (RoHS 2) Restriction of the use of certain Hazardous Substances in electrical and electronic equipment 2015/863 (RoHS 3) Amendment to Annex II of 2011/65/EU