

UHF INTEGRATED LONG-RANGE READERS

U640-M 10 dBi Long-Range UHF RFID Reader, 12 m+, Wiegand 26/34, RS485

The U640-M is a long-range integrated UHF RFID reader with a 10 dBi antenna in a narrow 240 × 420 mm portrait panel. It is rated to read EPC Gen2 tags beyond 12 m, depending on tag and site, for vehicle entry lanes and yard gates that report over Wiegand 26/34, RS232/RS485, USB or TCP/IP.

- Rated range beyond 12 m — a 10 dBi antenna and 0–30 dBm RF power can pick up tagged vehicles before they reach the barrier.
- Narrow portrait housing — 240 mm wide and 420 mm tall, so it fits on a slim post or beside a barrier cabinet.
- Frequency hopping (FHSS) — hops across the ordered 902–928 MHz or 865–868 MHz band.
- Controller and software outputs — Wiegand 26/34 to the controller, RS232/RS485 or USB to software, TCP/IP on the U640-N.
- Triggered or continuous — one trigger input lets a loop detector start each read cycle, with a buzzer indicator.
- Fits 30–50 mm poles — at 1.55 kg, it mounts on a clamp bracket for slim poles of 30–50 mm diameter.



General	
Model	U640-M (N-type) / U640-N (E-type with TCP/IP)
Product type	Long-range UHF RFID reader with integrated antenna
Frequency	902–928 MHz or 865–868 MHz, specified at order; other bands on request
Air interface	ISO 18000-6C, EPC Class 1 Gen 2
Antenna	Built-in, 10 dBi
RF output power	0–30 dBm, software adjustable
Frequency mode	FHSS (frequency hopping)

Tags & reading	
Supported tags	ISO 18000-6C / EPC Gen2 passive UHF tags (read and write)
Read range	Beyond 12 m (rated; depends on tag and site)
Read speed	< 6 ms average per 64-bit single-tag read
Read mode	Continuous (active) or triggered (passive), set by software
Trigger input	1
Indicator	Buzzer

Interface & output	
Interfaces, U640-M	Wiegand, RS232, RS485, USB
Interfaces, U640-N	Wiegand, RS232, RS485, TCP/IP, USB
Wiegand formats	Wiegand 26 / 34
Serial / USB data	Format set in the configuration software
SDK and software	Sample code in C#, Visual C++, VB, Java and Delphi; test demo; tag read/write and issuing demo

Physical & environment	
Dimensions	240 × 420 × 56 mm
Weight	1.55 kg (3 kg packed)
Power supply	DC 12 V, 3 A
Operating temperature	-20 °C to +65 °C
Storage temperature	-45 °C to +95 °C
Mounting	Pole clamp bracket for 30–50 mm poles, or wall
Color	Off-white

Ordering versions

U640-M — N-type: Wiegand 26/34, RS232/RS485, USB

U640-N — E-type: adds TCP/IP Ethernet (Wiegand 26/34, RS232/RS485, TCP/IP, USB)

Works with

- ✓ ISO 18000-6C / EPC Gen2 passive UHF tags: windshield tags, cards, labels and hard tags
- ✓ Access and parking controllers with a Wiegand 26 or 34 input
- ✓ Loop detectors or photo-beams on the trigger input
- ✓ PC software over RS232, RS485 or USB via the SDK; server software over TCP/IP (U640-N)

Not designed for

- × 125 kHz or 13.56 MHz cards — see access control readers
- × Active (battery-powered) tags
- × Switching a barrier directly — no relay output is listed; the controller or software does this
- × Writing tags over Wiegand — use the SDK or demo over serial, USB or TCP/IP

OEM / ODM options (confirmed per order)

- ◆ 902–928 MHz or 865–868 MHz build; other UHF bands on request
- ◆ RF power and read mode pre-set to your site values before shipment, on request
- ◆ Private label on the product label and carton, on request
- ◆ N-type U640-M or E-type U640-N with TCP/IP Ethernet
- ◆ Cable length and connector on request
- ◆ Supply with or without pole bracket and power adapter — confirmed in your quotation

Henrium · henrium.com · sales@henrium.com

Specifications describe the standard version and may change without notice. Read range depends on the card or tag, mounting and environment. Pricing, configuration, lead time and terms are confirmed in your quotation.