RFID
NanoNozzle Reader

- Compact
- Rugged
- Secure
- Wireless

Refueling Automation Solutions
Contactless technology

Uploads encrypted data to your fuel automation system

→ Designed to withstand harsh environments
→ Compact, self-contained unit
→ Requires no wiring or external power source.
→ Secure tamper protected device

Gilbarco Veeder-Root’s Nano Nozzle Reader (nNR) reads radio frequency identification (RFID) tags and devices using contactless technology. It uploads the encrypted data over the wireless mesh network to the site’s automation systems for refueling authorization.

The nNR is a compact self-contained unit that fits directly onto the fueling nozzle and requires no wiring or external power source. It features a universal installation kit which fits all common fueling nozzles and clean industrial design that seamlessly blends into the fuel dispenser.

The nNR is easy to install and transparent to the customer: it is automatically activated when the nozzle is removed from the cradle, initiating a search for vehicle identification devices.

During the course of the transaction, the nNR continuously monitors the vehicle identification device to ensure that the nozzle is not removed while the pump is dispensing, preventing fraud and misuse.

The nNR is a secure device, tamper-protected by a dedicated mechanism which detects unauthorized removal, deactivating the unit when such an attempt is made.

Designed to withstand harsh environments

Various sizes to fit all common nozzle models

<table>
<thead>
<tr>
<th>Spout Diameter</th>
<th>Activation Switch</th>
</tr>
</thead>
<tbody>
<tr>
<td>nNR</td>
<td>22-32mm</td>
</tr>
<tr>
<td>nNR + Switch</td>
<td>22-32mm</td>
</tr>
<tr>
<td>nNR Large + Switch</td>
<td>32-38mm</td>
</tr>
</tbody>
</table>
Technical Specifications

The following table provides technical specifications for the NanoNozzle Reader

### Physical

- **Supply Voltage:** 3.6 internal battery pack P/N 812560010
- **Power Consumption:**
  - Active Mode: 160mA
  - Standby Mode: 20 µA
- **Operating Temperature:** -40° to +60°C
- **Storage Temperature:** -40° to +85°C
- **IP Rating:** IP 67
- **Dimensions (H x W x D):**
  - nNR: 81x41x60.5
  - nNR Large: 86x53.5x60.5
  - nNR XL: 101.5x66x60.5
- **Weight:**
  - nNR: 132g
  - nNR Large: 151g
  - nNR XL: 173g
- **Communication Interface:**
  - RF to WGT: 2.405-2.480GHz
  - Typical transmission power: 3dbm (2mW)
  - RFID to ID unit: 108-131 kHz
  - Zone 1 Explosive atmosphere: Intrinsically Safe
  - Group IIB type product
  - Temperature Class: T3
  - Rated Temperatures: -40° ≤ T'amb ≤ +60°C

### Certification

- **ATEX Zone 1**
- **cLCus**
Find out how you could benefit from our automation solutions.

Email: GVR-mea-enquiries@gilbarco.com

www.gilbarco.com/mea