### Technical Specification

**ProGlove MARK 2**
(mid range or standard range)

**WIRELESS COMMUNICATION**
**SUB-1-GHZ**
Sub-1 GHz data transmission is only possible with ProGlove Access Point.

- **FREQUENCY RANGE**
  - EU: 863-870 MHz on 70 channels (100 kHz channel spacing)
  - NA: 902-928 MHz on 30 channels (752 kHz channel spacing)

- **TRANSMISSION RANGE**
  - ProGlove Access Point
    - Free field: +60 m (230 ft)**
    - Indoor: 15-30 m (100-300 ft)**
  - **May decrease in industrial environments (e.g. due to walls, metal, shelving, machines)

*This product supports AFA (Adaptive Frequency Agility) with LBT (Listen Before Talk): automatic switch to unoccupied frequencies in order to avoid collisions and to ensure secure data transmission.

**BLEUOTH LOW ENERGY**

<table>
<thead>
<tr>
<th>SUPPORTED PROTOCOLS</th>
<th>SUPPORTED OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bluetooth Low Energy</td>
<td>Android, iOS, Windows, MacOS</td>
</tr>
</tbody>
</table>

**TRANSMISSION RANGE**

<table>
<thead>
<tr>
<th>PART</th>
<th>TRANSMISSION Ranges</th>
</tr>
</thead>
</table>
| 1D   | **Free field:** 40 m (131 ft)**
|      | **Indoor:** 10-20 m (33-66 ft)**
| 2D   | **Free field:** 70 m (230 ft)**
|      | **Indoor:** 30-40 m (100-130 ft)**

**BARCODE DECODING CAPABILITIES**

<table>
<thead>
<tr>
<th>CODE TYPE</th>
<th>MAXIMUM SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 10 mil DataMatrix</td>
<td>25 alphanumeric characters, 4.57 mm * 4.57 mm</td>
</tr>
</tbody>
</table>

**ELECTRICAL PROPERTIES**

- **BATTERY:** 670 mAh, Lithium polymer (rechargeable)
- **CHARGING TIME:** 2 hours with ProGlove Charging Station
- **OPERATING TIME / SCANS:** approx. 10,000 scans depending on the application and environmental conditions

**MECHANICAL PROPERTIES**

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 x 45 x 16 mm</td>
<td>40 g (1.41 oz)</td>
</tr>
</tbody>
</table>

**ENVIRONMENTAL CONDITIONS**

- **DROP RESISTANCE:** Resists 100 drops from 2 m (6.5 ft) onto concrete
- **TUMBLINGS:** 1000 tumblings from 2 m
- **PROTECTION AGAINST DUST AND WATER:** IP 54
- **TEMPERATURE:** Operating: -20°C - 50°C (-4°F - 122°F)
  - Charging: 5°C - 40°C (41°F - 104°F)
  - Storage: -20°C - 60°C (-4°F - 140°F)
- **HUMIDITY:** 5% - 95% non-condensing
- **ELECTROSTATIC DISCHARGE (ESD):** ±5 kVdc contact discharge, ±8 kVdc air discharge
- **Trigger et al.**
  - Scanner can be triggered only with ProGlove wearables (REEL, Index Trigger et al.).

**INTERFACES**

<table>
<thead>
<tr>
<th>BLUETOOTH</th>
<th>HID Profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>LASER CLASSIFICATION</td>
<td>MID RANGE: According to EN 60825-1: 2014 and IEC 60825-1 (Ed. 3.0)</td>
</tr>
<tr>
<td>USB</td>
<td>ProGlove Gateway</td>
</tr>
<tr>
<td>RS232</td>
<td>ProGlove Access Point (HID / CDC)</td>
</tr>
</tbody>
</table>

**SCANNER PROPERTIES**

- **READING FIELD OF VIEW**
  - Standard range: horizontal: 48°, vertical: 36.7°
  - Mid range: horizontal: 31°, vertical 23°

- **SKEW, PITCH & ROLL**
  - Skew tolerance: ±60°
  - Pitch tolerance: ±60°
  - Roll tolerance: ±360°

- **AMBIENT LIGHT:** 0 - 96,900 lux
- **AIRM:** 650 mm, 1 mW

**UTILITIES & ACCESSORIES**

<table>
<thead>
<tr>
<th>CONFIGURATION &amp; DEVICE MANAGEMENT</th>
<th><a href="https://insight.proglove.com">https://insight.proglove.com</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>DEVELOPER DOCUMENTATION</td>
<td><a href="https://developers.proglove.com">https://developers.proglove.com</a></td>
</tr>
<tr>
<td>ANDROID INTEGRATION</td>
<td>Insight Mobile: Provides a full featured integration for Android enterprise applications.</td>
</tr>
<tr>
<td>GATEWAY INTEGRATION</td>
<td>ProGlove Gateway: Hardware connector to enable the full capabilities of the ProGlove Ecosystem via USB-interface.</td>
</tr>
<tr>
<td>ACCESS POINT CONFIGURATION</td>
<td>ProGlove Access Point: Plug-and-play connection to IPC, Terminal, Tablet via USB (HID/CDC) or RS232. Configuration via <a href="https://config.proglove.de/">https://config.proglove.de/</a></td>
</tr>
<tr>
<td>TRIGGER</td>
<td>Scanner can be triggered only with ProGlove wearables (REEL, Index Trigger et al.).</td>
</tr>
</tbody>
</table>

**SCAN RANGES**

Minimum distance determined by symbol length, scan-angle and environmental conditions

**STANDARD RANGE**

- The smallest symbol in the barcode (the mil-inch (mm) number indicates the size of the smallest function in the barcode)
- Possible distance between user and barcode
- 3 mil code 39: 2.8 in./7.1 cm to 6.2 in./15.8 cm
- 5 mil code 128: 2.3 in./5.8 cm to 8.7 in./22.1 cm
- 5 mil code PDF417: 3.0 in./7.6 cm to 8.1 in./20.6 cm
- 10 mil DataMatrix: 2.4 in./6.1 cm to 10.6 in./26.9 cm
- 100% UPCA: 1.6 in./4.1 cm to 23.0 in./58.4 cm
- 20 mil code 39: 1.6 in./4.1 cm to 36.3 in./92.2 cm

**MID RANGE**

- 5 mil (0.127 mm) code 128: 7.4 in./18.2 cm to 16.0 in./40.6 cm
- 5 mil (0.127 mm) PDF417: 8.1 in./20.6 cm to 13.1 in./33.3 cm
- 10 mil (0.254 mm) DataMatrix: 7.0 in./17.8 cm to 17.0 in./43.2 cm

**STANDARD RANGE**

- 100% UPCA: 2.3 in./5.8 cm to 38.0 in./96.5 cm
- 20 mil (0.508 mm) code 39: 2.1 in./5.3 cm to 54.0 in./137.2 cm
- 100 mil (2.54 mm) code 39: 11.0 in./27.9 cm to 172.0 in./436.9 cm

**WARRANTY & SLA**

- WARRANTY: 12 month factory warranty
- PROGLOVE CARE: 36 and 60 month maintenance contracts available. For more information please contact your ProGlove representative or visit https://proglove.com

**SAFETY & REGULATORY**

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LASER CLASSIFICATION</td>
<td>MID RANGE: Laser class 2 device. Caution Laser Radiation</td>
</tr>
</tbody>
</table>

**COUNTRY CERTIFICATION**

Regulatory markings are affixed to the device, indicating that the radio modules are approved for use in the following regions: European Economic Area*, Canada, United States of America, United Mexican States

Detailed information on the regulatory markings can be found in the Declaration of Conformity (DoC) at www.proglove.com

*CE is valid in the European Economic Area and additional countries: Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom, Iceland, Liechtenstein, Switzerland and Norway.

Product specifications are subject to change without notice. For updated version of product specifications visit: www.proglove.com
Workaround GmbH, Rupert-Mayer-Str. 44, Building 64.08, 81379 München
August 2020