

TECHNCIAL DATA for ProGlove System "MARK:" SCANNER MARK 2 standard range, mid range, ACCESS POINT ONE S, CHARGING STATION

SCOPE OF APPLICATION

Application of the ProGlove system in industrial field, such as production, assembly, logistics. Please contact the manufacturer for other application areas

TECHNICAL SPECIFICATIONS

WIRELESS COMMUNICATION

SUB-1-GHz

FREQUENCY RANGE	EU: 863-870 MHz on 70 channels (100 kHz channel spacing) SA: 902-928 MHz on 30 channels (752 kHz channel spacing)
TRANSMISSION POWER	≤ 9dBm
ENCRYPTION	AES-128
TRANSMISSION RANGE	Free field: >60m ** Indoor: 15-30m ** **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.

BLUETOOTH LOW ENERGY

SUPPORTED BLUETOOTH VERSIONS	Bluetooth Low Energy 4.0, 4.1, 4.2, 5.0, 5.1
TRANSMISSION POWER	≤ 0dBm
ENCRYPTION	AES-128
TRANSMISSION RANGE	Line-of-sight: 10m** **may decrease in industrial environments (e.g. due to walls, metal shelving, machines)
PROTOCOL	BLE HID over GATT

BARCODE DECODING PROPERTIES

1D	All common 1D
2D	PDF417, MicroPDF417, Data matrix, QR Code, Micro QR Code, Aztec, RSS, Composite, TLC-39, MaxiCode
POSTAL	US PostNet, US Planet, UK Postal, Australia Postal, Japan, Postal, Dutch Postal (KIX)

TECHNCIAL DATA for ProGlove System "MARK:" SCANNER MARK 2 standard range,
mid range, ACCESS POINT ONE S, CHARGING STATION

ELECTRICAL PROPERTIES

BATTERY TYPE	Lithium polymer (rechargeable)
CHARGING DURATION	2 hours via power supply SAW-0501200GB
OPERATING DURATION / SCANS	up to 6000 scans depending on application and environmental conditions
POWER SUPPLY CHARGING STATION	5 VDC (1.2A) via power supply SAW-0501200GB
POWER SUPPLY ACCESS POINT VIA USB	5 VDC (0.5A) via host computer
POWER SUPPLY ACCESS POINT VIA RS232	12 VDC (1A) via power supply PG12-10P55

ENVIRONMENTAL CONDITIONS

DROP RESISTANCE	Scanner: Resists > 50 drops from 2 m (onto concrete)
PROTECTION AGAINST DUST AND WATER	Scanner: IP54 Access Point: IP22 charging station: IP20
TEMPERATURE:	Operation: -5 - 50 °C Storage: -20 - 60 °C Rel. air humidity: 95% (non-condensing)

TECHNCIAL DATA for ProGlove System "MARK:" SCANNER MARK 2 standard range, mid range, ACCESS POINT ONE S, CHARGING STATION

INTERFACES

ACCESS POINT	USB CDC / RS-232, 9600, 19200, 38400, 57600, 115.200 baud USB HID (keyboard input on host), layouts: <ul style="list-style-type: none">• Croatian• Czech• Danish• English (GB)• English (US)• French (Belgium)• French (Canada)• French (France)• Finnish• German (Germany)• German (Switzerland)• Hungarian• Icelandic• Irish• Italian• Norwegian• Polish• Portuguese (Brazil)• Portuguese (Portugal)• Romanian• Slovakian• Slovenian• Spanish• Swedish• Turkish
BLE HID	<ul style="list-style-type: none">• Croatian• Czech• English (GB)• English (US)• French (Belgium)• French (Canada)• French (France)• German (Germany)• German (Switzerland)• Italian• Portuguese (Brazil)• Portuguese (Portugal)• Slovakian• Slovenian• Spanish

TECHNCIAL DATA for ProGlove System “MARK:” SCANNER MARK 2 standard range, mid range, ACCESS POINT ONE S, CHARGING STATION

MECHANICAL PROPERTIES

DIMENSIONS	Scanner: 50 x 45 x 16 mm Access Point: 138 x 64 x 33 mm Charging station: 140 x 56 x 19 mm
WEIGHT	Scanner: 40 g Access Point: < 100 g (without cable) charging station: 110 g

SCANNER PROPERTIES


READING RANGE	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	Maximum of 96,900 lux (direct sunlight)

DECODER RANGES

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
standard range	
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 PDF417	3.0 in./7.6 cm to 8.1 in./20.6 cm
10 mil DataMatix	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./18.8 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
Example: A 10 mil DataMatrix symbol, which can carry 25 alphanumeric characters, has a size of 4.57 mm * 4.57 mm	
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

TECHNCIAL DATA for ProGlove System "MARK:" SCANNER MARK 2 standard range,
mid range, ACCESS POINT ONE S, CHARGING STATION

CERTIFICATION AND DETAILS - Access point, scanner and charging station

DESIGNATION	
RADIO	<p>2014/53/EU Radio Equipment Directive (RED) ETSI EN 300 220-1 V3.1.1:2017 ETSI EN 300 220-2 V3.1.1:2017 ETSI EN 300 220-2 V3.2.1:2018 ETSI EN 300 328 V2.1.1:2016 EN 61000-4-11:2004 EN 61000-4-6:2014 EN 61000-4-5:2014 EN 61000-4-4:2012 EN 61000-4-3:2006+A1:2008+A2:2010 EN 61000-4-2:2009 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 55022:2010 + AC:2011</p>
OTHER	<p>Safety / LVD testing as per IEC 60950-1:2005/AMD1:2009 IEC 60950-1:2005/AMD2:2013 IEC 60950-1:2005 EN 60950-1: 2006 / A11: 2009 / A1: 2010 / A12: 2011 / A2:2013 2011/65/EU Restriction of Hazardous Substances (RoHS)</p>
LED CLASSIFICATION	<p>Standard range: Excluded risk group LED product according to IEC/EN 62471 Mid-range: According to CDRH Class II/IEC 825 Laser class 2 device</p>
COMPLIANCE WITH ENVIRONMENTAL REGULATIONS:	Complies with EU-RoHS