Technology Solutions (UK) Ltd

www.tsl.uk.com

1128 *BLUETOOTH*® UHF RFID READER

HIGH PERFORMANCE, *BLUETOOTH*® WIRELESS ENABLED UHF RFID READER



With iPod touch® (5th Generation)



With Slimline Grip and UHF antenna



With trigger handle & 2D UHF antenna



With Motorola MC40



Modular design

Made for iPod iPhone iPad

Bluetooth®

Data Collection Performance Like No Other

TSL's new 1128 *Bluetooth*® UHF RFID reader provides new levels of RFID performance. With its R2000 core and range of interchangeable high performance antennas, the 1128 pverforms like no other reader giving the user the highest levels of flexibility currently available in today's market. Designed to read and write to EPC Class 1 Gen 2 (ISO18000-6C) tags, the 1128 can also be configured with class leading high performance 2D data scanning to bring unparalleled data collection capabilities to any host it is connected to. The Motorola SE4500 engine incorporates fast-pulse illumination and fast sensor shutter speeds, delivering outstanding motion tolerance and class leading 1D and 2D data capture.

Platform Independent UHF RFID Reader

Use existing *Bluetooth*® wireless technology enabled1 host devices including Enterprise Handhelds, Consumer Phones, Touchscreen MP3 players, Tablets and PC's – the 1128 will bring high performance RFID and 2D scanning to all these devices running a wide range of Operating Systems. The 1128 *Bluetooth*® UHF RFID reader can also be tethered to a PC using a USB cable.

Extensive software support is available for a wide range of platforms including code samples, demonstration applications and source code.

As Easy As ABC....

The new 1128 *Bluetooth*® UHF RFID reader incorporates TSL's unique ASCII protocol for faster and easier application development. This sophisticated parameterised ASCII protocol provides the developer a powerful set of commands that carry out multiple actions locally within the reader. This approach enables multiple tag operations executed using simple pre-configured ASCII commands which not only speeds integration of the reader into applications but also abstracts the developer from some of the complexities of the underlying Native API and ultimately results in un-paralleled levels of performance.

A Configuration To Suit Your Application

The choice of host device is yours - from low cost touchscreen MP3 players through to fully featured Enterprise Handheld Terminals. The choice of ergonomic style includes a compact slimline grip through to a comfortable trigger handle for scan intensive RFID and 2D bar code data collection applications.

EPC data can be stored on an optional MicroSD memory card (at least 25 million Transponder EPCs on a typical 2GB card). This allows logging of all transponder EPC readings and provides the ability to collect data even if USB or *Bluetooth*® communication channels are not available.

Features:

High Performance *Bluetooth*® Multi-modal Data Capture

UHF RFID and 2D barcode data capture in one integrated *Bluetooth*® device.

Hardware Platform Independence

Operates with wide variety of *Bluetooth*® wireless technology enabled host devices including touchscreen MP3 players, phones, tablets, Enterprise Handhelds and PC's.

OS Independence

Operates with iOS, Windows Mobile, Windows Phone 8, WinCE, Windows XP, 7, 8, Android.

Batch Data Collection

Removable high capacity Micro SD data card and real time clock for extended batch data collection independent of host connection.

Flexible Configuration

Unique interchangeable high performance antennas including optional 2D scanning and trigger handle with a range of device specific mounts for holding phones and MP3 players.

High Performance barcode scanning

Integrated Motorola SE4500 imaging engine provides class leading barcode scan performance via its unique patent pending fast pulse illumination which delivers outstanding motion tolerance and class leading 1D and 2D data capture

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SPECIFICATIONS

Physical and Environmental Characteristics

Dimensions (LxWxH):	16.0 cm x 7.7 cm x 16.9 cm – Trigger handle 16.0 cm x 7.7 cm x 9.7 cm – Slimline grip
Weight:	380 g / 13.4 oz (including battery & trigger handle)
User input:	Trigger button
User feedback:	Speaker, vibration motor, LED
Power:	Removable, rechargeable 4.2 volt Lithium Polymer 2200 mAh battery pack, 8.4 watt hrs
Enclosure materials:	Polycarbonate

Performance Characteristics

RFID engine:	TSL custom module with embedded Impinj R2000
Communication protocols:	TSL ABC (Parameterised ASCII command set) Impinj binary
Memory:	Supports up to 32 GB Micro SD/SDHD CARD
Compatible Host devices (*Bluetooth*®):	Android, iOS, Windows CE, Windows Phone 8, Windows Mobile 5/6.1/6.5 or Windows XP/ Vista/7. Host device must have *Bluetooth*® wireless technology functionality.
Compatible Host devices (USB):	Any USB host with FTDI VCP driver support (Windows, Linux, Mac, Android)

Environmental

Operating Temp.:	-4°F to 140°F / -20°C to 60°C
Charging Temp.:	41°F to 104°F / 5°C to 40°C
Storage Temp.:	-40°F to 158°F / -40°C to 70°C
Humidity:	5% to 95% non-condensing
Drop Spec:	Multiple drops to concrete: 4 ft./1.2 m ambient, 3ft / 0.9m across the operating temperature range
Tumble:	500 0.5 metre tumbles at room temperature (1,000 cycles)
Environmental Sealing:	IP54
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
Nominal read range[2]:	up to 13 ft. /up to 4m
Nominal write range[2]:	up to 4 ft./ up to 1.22 m
Field:	150-degree forward facing (approx.) measured from front of device
Antenna:	Detachable, Circularly Polarized with optional 2D scanner
Frequency Range:	EU: 865-868MHz; US: 902-928MHz
Output Power:	10mW to 800mW
Antenna options:	High Performance CP High Performance CP with 2D Imager Custom antennas available

Barcode Scanning

Imager:	Motorola SE4500 2D imager
Sensor Resolution:	752 x 480 pixels
Field of View:	Horizontal: 40°, Vertical: 25°
Focal Distance:	SR: 8 in. DL: 5.3 in. HD: 2.9 in.
Aiming LED (VLD):	655 ±10 nm Laser
Illumination:	625 ±5 nm LEDs (2x)
Min. Print Contrast:	Minimum 25%
Symbologies Supported:	1D: All major codes 2D: PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode Postal Codes: US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal Dutch Postal (KIX)
Ranges[3]:	DL Focus / Near / Far 5 mil Code 39 / 1.4 in./36 mm / 7.3 in./185 mm 100% UPC / 1.6 in./41 mm / 12 in./305 mm 5 mil PDF417 / 2.8 in./71 mm / 4.5 in./114 mm

Bluetooth® wireless technology

Bluetooth®:	*Bluetooth*® Version 2.1 SPP and Apple iApp - or - *Bluetooth*® HID (configurable)
Bluetooth® Class:	Class 2
Bluetooth® Range4:	10m
Bluetooth® pairing:	PIN, Simple Secure Pairing, NFC OOB Pairing (TBA)

Peripherals and Accessories

External interface:	MicroUSB connector for battery charging, and USB connectivity.
USB operating modes:	Tethered for real time data capture in conjunction with SmartWedge software. Download of stored scan data.
Optional desktop charger:	TSL 1136 4-Slot battery charger
Other Accessories:	Adapter mounts for a variety of smartphones, handheld terminals and touchscreen MP3 players Slimline Grip, Trigger Handle

Regulatory

General:	Approved for use in the US, Canada, Europe, China, Singapore, Taiwan, Korea and Australia
Electrical Safety:	Certified to UL60950-1, CSA C22.2 No. 60950-1, IEC 60950-1, EN 60950-1
EMI/RFI:	USA: FCC Part 15 Canada: ICES 003 Class B EU: EN 301 489-3, EN 301 489-1, EN 301 489-17, EN 302-208, EN55022 Class B, EN55024
Laser Safety:	IEC Class2/FDA Class II in accordance with IEC60825-1/EN60825-1, 21CFR1040.10

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EXAMPLE CONFIGURATIONS



With Galaxy Nexus



With Motorola
ET1 Enterprise Tablet



With Motorola ES400



With Apple iPod touch® (4th & 5th gen)



With *Bluetooth*® wireless
technology enabled computer



With Motorola MC2180

PART NUMBERS

RFID Reader Options

1128-EU-BT-UHF-A1 (ETSI) 1128-US-BT-UHF-A1 (FCC)	1128 *Bluetooth*® RFID reader with UHF antenna & trigger handle, battery, battery cover, Micro USB cable, USB charger
1128-EU-BT-UHF-IMG (ETSI) 1128-US-BT-UHF-IMG (FCC)	1128 *Bluetooth*® UHF Reader with 2D Imager, UHF antenna, trigger handle, battery, battery cover, Micro USB cable, USB charger

Grip handle options	
1128-SLG	Slimline Grip attachment
Device mount options*	
1128-MNT-UNI	Accessory Mount

*A range of customisable holders are available by special request - these include mounts for Motorola MC40, MC45, ES400, MC2100, iPhone (4th and 5th gen), iPod touch (4th and 5th gen), Samsung Galaxy Nexus and other handheld devices. Currently these are available in SLS RP materials only.

WARRANTY

Warrranty

The TSL 1128 reader is warranted against defects in workmanship and materials for a period of one year (12 months) from date of shipment, provided the product remains unmodified and is operated under normal and proper conditions.

[1] Compatible *Bluetooth*® stack required in the Host device
[2] Tag Read/Write performance is dependent on tag type, items tagged, number of tags in the field and other radio and environmental factors
[3] Artificial lighting can affect scanning performance
[4] Open field

Terms

"Made for iPod," "Made for iPhone," and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone, or iPad may affect wireless performance.

iPad, iPhone, iPod and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

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ABOUT TSL

TSL designs and manufactures both standard and custom embedded, snap on and standalone peripherals for handheld computer terminals. Embedded technologies include:

- RFID - Low Frequency, High Frequency & UHF
- *Bluetooth*® wireless technology
- Contact Smartcard
- Fingerprint Biometrics
- 1D and 2D Barcode Scanning
- Magnetic Card Readers
- OCR-B and ePassport

Utilizing class leading Industrial design, TSL develops products from concept through to high volume manufacture for Blue Chip companies around the world. Using the above technologies TSL develops innovative products in a timely and cost effective manner for a broad range of handheld devices.

CONTACT

Address: Technology Solutions (UK) Limited, Suite C, Loughborough Technology Centre, Epinal Way, Loughborough, Leicestershire, LE11 3GE. United Kingdom.

Telephone: +44 (0)1509 238248

Fax: +44 (0)1509 220020

Email: enquiries@tsl.uk.com

Website: www.tsl.uk.com

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Solutions for Automatic Identification, Barcodes and Mobility

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www.logiscenter.com
902 050 030

www.logiscenter.it
02 479 216 97

www.logiscenter.de
info@logiscenter.de

www.logiscenter.pt
308 800 842

About LOGISCENTER

Grupo Logiscenter is the leading provider in Europe of automatic identification and data capture equipments. Our products include barcode printing and reading devices, mobile computing devices, wireless access points, identification cards, and consumables.

Reasons to work with us

Our customers come first. Our objective is not only selling our products but also holding a long-lasting relationship with our customers, based on the befenits and advantages we create for you and your company.

The best brands. We offer products from the best manufacturers worldwide.

Expert technical support team. Our support staff are experts in the products we sell. But not just the products, they can tell you the best solution for your particular problem or need.

Largest stock. We have a permament stock of more than 12,000 products.

Same-day shipping. For all orders placed and confirmed before 16:00 on working days.

Best prices. With Logiscenter, you can be sure that you are paying a fair price for your products we will not overcharge you.

Easy returns. Damaged or defective products can be returned easily, for an exchange or reimbursement.

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symbol

Solutions for: Industry • Consumer • Mobility Transportation and Logistics • Retail • Health



Label printers



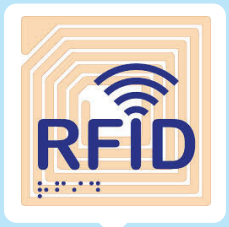
Barcode readers



Data terminals & PDA



PVC card printers



RFID



Consumables
(labels, ribbons, PVC cards)

All Brands Technical Service

GRUPO LOGISCENTER, S.L. - The Barcode Solutions Center
Av. Puente Cultural 10-A • 28702 San Sebastián de los Reyes - MADRID (Spain)
CIF ES B85538601 • info@logiscenter.com • www.logiscenter.com