The Total Group of Companies

Fire, Safety & Rescue Equipment Software

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EXECUTIVE SUMMARY

Objective

Inventory tracking and reporting is an absolute must in todays age - life safety and emergency equipment is even more important. As a leading provider of services in this industry, Total Fire Solutions saw a need that wasn't being met to our standards, so we went out and created a robust, customizable program that could stand up to the requirements that we expect from this type of tool.

Overview

This project was initially driven by the needs within our own company for tracking and quality custom reporting. Everything that we do is driven by a standard that demands our work be completed in a certain way, and then clearly documented. These standards include the Alberta Safety Codes, National Fire Codes, NFPA codes, OH&S Legistlation, etc. It's important that the job gets done, but it's equally important that you have quality records to prove it. We believe that this program can do that for us.

The following are some key points about the software:
1. **It's Customizable**. If we want to add a notes field, or add the ability to take a picture, or add a GPS location to each record, we wanted the ability to do that - or remove it. This software meets this requirement.
2. **It's User Friendly**. While there is a lot of information within the records, we wanted the inspection process to be easy. Simply scan the code and answer a few questions - it's that simple.
3. **It Works Without a Signal**. Many software programs require a data signal while being used. Our program can be used offline, and as soon as it gets back into a signal it uploads all the records to the server automatically. Data is securely stored on servers and can be accessed easily at any time.
4. **Its Safe**. All of our hardware is intrinsically safe for use in hazardous locations. We also have units without cameras coupled with bluetooth barcode scanners for companies with "no camera" policies.
5. **It Updates Automatically**. We wanted to eliminate the need for our customers to have to involve their IT people in keeping the software updated. Anytime there is an update, improvement, or change the update will automatically sync with the device and install the changes seamlessly.
6. **It Keeps You Honest.** For customers that are using the software and relying on the workforce to complete the monthly checks, we wanted to ensure that the equipment is actually being checked. Our software takes a digital GPS imprint of the location each and every time an item is checked, allowing you to see approximately where the person was when the equipment was located.

The software contains so many more features not covered here, but understand that if there is something specific that your company would like to see or have done, we can talk with the development team and make many modifications to suit your requirements.

COSTS

Custom Designed Applications

The following is pricing for the monthly software access and hardware options to suit your environment.

Choose a Membership Level	Price per Month
Bronze Membership - Includes the Use of One App from our Program Portfolio	$ 250
Silver Membership - Includes the Use of Two Apps from our Program Portfolio	$ 399
Gold Membership - Includes the Unlimited Use of All the Apps in our Program Portfolio	$ 499

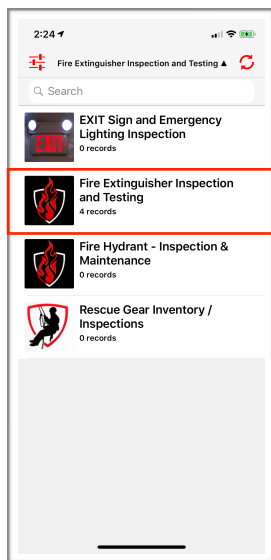| Choose Your Hardware	Price per Month
Panasonic FZ-N1 Handheld Tablet	$ 99
Ecom TAB-EX Handheld Tablet	$ 99
No Camera Tablet with Stand-Alone Barcode Reader	$ 259
One-time set up programming fee	$ 299

Choose Your Apps	
Fire Extinguisher - Tracking & Monthly Maintenance	**SCBA** - Bottle Tracking and Air Monitoring
Emergency Eyewash Stations - Tracking & Monthly Checks	**Fire Pump** - Annual Flow Testing / Monthly Run Tracking
Emergency Lighting - Tracking & Monthly Checks	**Fire Hydrant** - Maintenance & Flow Testing
Rescue Gear - Use Logging / Annual & Monthly Inspections	**Vehicle Inspections** - Weekly/Monthly Checks

Custom Apps - Custom apps can be created for your unique situation. Prices for App Development vary based on complexity. Talk to one of our System Specialists today to discuss your ideas and get a quotation.
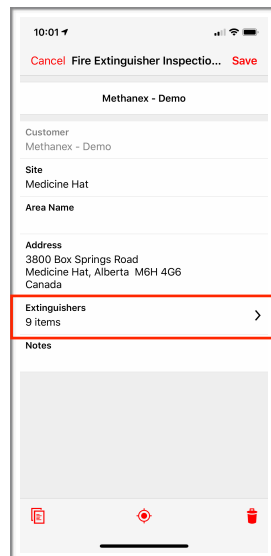
Fire Extinguisher - Tracking & Monthly Maintenance

This program requires the logging of all of your fire extinguisher data electronically. Once the items are logged into the system, the users can then perform their monthly checks on the equipment using the handheld scanners. The following is an example of what the monthly user checks would look like on the screen of the handheld:
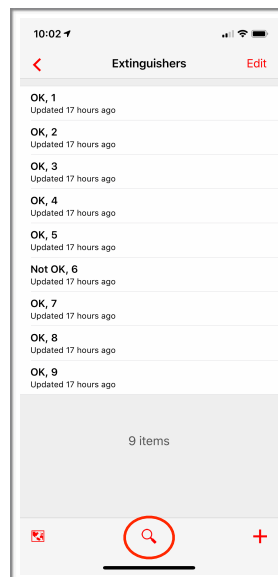
1. Open the App

← Depending on the amount of Apps your organization has subscribed to, they will all show up here. From the list, you would simply click on Fire Extinguisher Inspection & Testing

← This then opens up the screen that shows your organization, site, address and all of your extinguisher records. For this demo, you can see that there are 9 extinguisher records. The user would click on the extinguishers to access the screen

← Here you will find the list of your extinguishers. In this case we have simply given the extinguishers numbers 1 through 9, but you can number them in whichever way makes sense for your organization. You'll note that if there is something wrong with a record it will show up here as a "Not OK" (the issue will also show up in the Reports Section). At this point, the user will click on the search button 🔍 to scan a barcode.

←Once you have scanned the barcode, if the record is in the system it will come up like this. Here, the lighter grey information is "locked" to that record so the standard user cannot change or modify anything in these areas. They will simply click on "Inspections/Tests"

←Here you will find a list of all the monthly checks that have been done on this extinguisher (in this case only one). You can click on the record to view it, or using the **+** button at the bottom right you can start a new monthly inspection.

←Here the user simply answers the questions Yes or No. They have an option to take a picture and add any notes that might be relevant to the inspection.

The red dot at the bottom indicates that the record is being Geo-tagged as it's being completed. This allows management to see that the user was actually located at the extinguisher when the test was being done. The date also auto-populates and cannot be altered.

Click SAVE and the monthly inspection is complete.

The user would then simply move onto the next extinguisher and complete the next inspection in the same way.

Once all of the inspections are complete the user can come back to the main screen and using the 📄 Report button in the bottom left of the screen, can run a report to ensure all the inspections have been done.

The report will outline all the details about your extinguishers - locations, when they are due for maintenance, if the monthly checks were done, and also outlines any deficiencies and notes about the units. These reports are available for download into all of the different reporting formats - pdf, excel, or csv.

Summary

Electronic tracking - if done correctly - can ensure that your equipment is being properly inspected and serviced as set forth by the different governing agencies that are putting the standards in place. We believe that we are creating a solution to a problem that has been around for a long time - and that is having one easy to use platform available for all of your Fire Safety and Rescue tracking and maintenance needs.

TOUGHPAD FZ-N1

4.7'' SLIM AND LIGHTWEIGHT HANDHELD TABLET WITH ANGLED REAR BARCODE READER

The Toughpad FZ-N1 with Android™ 6.0 is one of the thinnest and most lightweight handheld tablets in the 4.7'' category. The device offers numerous unique features, including an angled rear barcode reader which protects users from repetitive strain and enhances productivity, and an optional passive and active pen for precise handwriting and signature capture.

This cutting-edge device has been designed for mobile workers in the postal and courier services, transportation and logistics, emergency and public safety, utilities, retail, manufacturing and defence sectors.

- Android™ 6.0
- 4G LTE / 3G data and voice capability
- Integrated 1D/2D angled rear barcode reader
- Qualcomm® MSM8974AB 2.3 GHz Quad-core processor
- 2 GB RAM, 16 GB storage and microSD card slot
- 4.7'' HD (1280 x 720) daylight-readable display with glove and rain mode
- Optional passive and active pen for precise signatures
- MIL-STD 810G certified with 1.8 metre drop resistance

- IP68 rated (submersible in water up to 1.5 metre for 30 minutes)
- 8MP rear and 5MP front camera
- User-replaceable battery with warm-swap function
- NFC, Bluetooth 4.1, WiFi, micro USB port and docking connector
- Triple microphones for superior noise suppression
- Dual front speakers delivering in total up to 100 dBA

TOUGHPAD

www.toughbook.eu

A BETTER ANGLE ON BUSINESS

FULLY FEATURED 4.7" HANDHELD TABLET

The FZ-N1 brings together the best of handheld, smartphone and barcode reader functionality into a single rugged and hard working tablet. Thanks to its fully-rugged design, with MIL-STD-810G certification, IP68 rating, 1.8-metre drop resistance and the ability to withstand as many as 1,000 tumbles from a height of 1 metre, the device delivers a long life span and very low TCO. The user-replaceable and warm-swappable battery, combined with a range of accessories such as carry and mounting solutions, make it a truly mobile device.

Mobile Computing Platform	Qualcomm ® MSM8974AB 2.3 GHz Quad-core processor	
Operating system	Android ™ 6.0	
Display	4.7" HD (1280x720 pixels), 16:9 aspect ratio	
	10 point multi-touch capacitive touchscreen with glove and rain mode	
	Daylight viewable (up to 500 cd/m2)	Anti-reflective and anti-glare screen treatments
	Supports both passive pen* and active pen* as default	
RAM, Storage and expansion	2 GB RAM, 16 GB eMMC and micro SDXC card slot (max. 64 GB)	
Audio	3x mics (2x Front & 1x Rear)	
	2x Loud speakers (delivering in total up to 100 dBA)	
Barcode reader	Angled rear barcode reader with aimer and light	44 types of 1D/2D barcodes supported
Camera	Rear:	8 MP rear camera with bright LED light (Video: 1920 x 1080 pixels (FHD) 30 fps, Still: 3264 x 2448 pixels (8MP))
	Front:	5 MP (Video: 1920 x 1080 pixels (FHD) 30 fps, Still: 2592 x 1944 pixels (5MP))
Sensors	Ambient light sensor, Digital compass, Gyro sensor, Acceleration sensor	
Power	Battery (Standard / Extended*):	Standard: Li-ion 3.8V, 3,200 mAh (typ.) / Extended*: Li-ion 3.8V, 6,400 mAh (typ.)
		User replaceable with warm swap function
	Battery operating time (Standard / Extended*):	Continous data access time**: up to 8 hours / 16 hours
		Talk time: up to 24 hours / 48 hours
		Standby time: up to 700 hours / 1400 hours
	AC Adapter:	USB charger with micro USB cable
Interfaces	micro USB 2.0:	x1 (For charging and data transfer)
	Docking connector:	x1
	Headset jack:	x1 (3.5mm)
Buttons	User configurable buttons:	x5 (A1, A2, A3, left yellow and right yellow buttons)
	Power on/off button:	x1
	Dedicated camera button:	x1 (For rear or front camera)
	Volume buttons:	x2
Wireless	Bluetooth:	v4.1 (class 1)
	WLAN:	IEEE802.11 a/b/g/n/ac
	Voice & Data:	LTE, HSPA+, UMTS, EDGE, GPRS, GSM
	Micro SIM slots:	x2 (Dual SIM Single standby)***
	GPS:	GPS / GLONASS CEP50 (±2 to 4 m)
	NFC:	Yes (Type A, Type B and Felica)
Security	FIPS140-2 level-1 compliant, Built-in ARM ® TrustZone ®	
Ruggedness	Fully rugged design with sealed ports, MIL-STD-810G certified, 1.8 metre drop resistant	
	2,000 drops (1,000 tumbles) each 1.0 m {3.2 ft.}	
	Raised bezel for LCD impact protection	
	IP68 rated (submersible in water up to 1.5 metre for 30 minutes)	
	-10°C to +50°C operating temperature	
Dimensions (WxDxH)	With Standard Battery: 74 mm x 156 mm x 16.3 mm / 31mm (Barcode reader section) {2.9" x 6.1" x 0.6"/1.2" (Barcode reader section) } (without protruding parts)	
	With Extended* Battery: 74 mm x 156 mm x 26 mm / 31mm (Barcode reader section) {2.9" x 6.1" x 1.0"/1.2" (Barcode reader section) } (without protruding parts)	
Weight	With Standard battery: 277g (0.61lb.)	
	With Extended* battery: 368g (0.81 lb.)	
What's inside the box	FZ-N1 Handheld tablet, standard battery, USB charger with micro USB cable and operating instructions manual	
Accessories	Charging cup with stand	
	AC Adaptor for charging cup with stand (60W)	
	Single Device Cradle	
	Multi Device Cradle (4-bay)	
	AC Adaptor for Multi Device Cradle (110W)	
	Hand Strap	
	Holster	
	Vehicle mount	
	Standard Battery Pack (3200mAh)	
	Extended Battery Pack (6400mAh)	
	Shatterproof film	
	Passive pen	
	Active pen	

Panasonic

BUSINESS

www.toughbook.eu

Tab-Ex® 01 Series for D2 und DZ2

UNIQUELY CONNECTED -
IN HAZARDOUS AREAS

Tab-Ex® 01

www.hazardous-area-tablet.com

Built for Business

DIVISION 2

ecom
MOBILE SAFETY

D2

Tab-Ex® 01

Tab-Ex® 01 - Z2 / D2

1 Global certifications - one common platform

2 Operating System
- Android™ Lollipop 5.1.1
- Android™ KitKat 4.4.4

3 Wireless capability as
- WLAN
- WWAN (UMTS, HSPA, Cellular*)

4 Front and rear camera
- 3 MP with rear camera Flash with Barcode Scanner capability
- 1.3 MP front camera

5 Reinforced security with Samsung KNOX

6 Accessories and peripherals to enable broader use

* depending on carrier & regional availability

ECOM´S HAZARDOUS AREA TABLET TAB-EX® 01

Brings new customer focused solutions and improved ease of use to mobile workers in Oil & Gas, Refining, Chemical, Pharmaceuticals and other hazardous industries. Recognising that many work tasks are performed in both non-hazardous and hazardous areas, ecom is launching an entire family of compatible tablets, peripherals and accessories suitable for worldwide use.

Being able to offer the same internal tablet, Samsung GALAXY Tab Active, ecom provides a key benefit of consistency in product use - whether Rugged, Zone 2 / DIV 2 or even Zone 1/21 and DIV 1.

NFC & GPS

DZ2

	ZONE 2 / DIVISION 2	DIVISION 2
Operating System	Android™ Lollipop 5.1.1 Android™ KitKat 4.4.4	Android™ Lollipop 5.1.1 Android™ KitKat 4.4.4
Processor	Quad core 1.2 GHz processor	Quad core 1.2 GHz processor
Memory and Storage	1.5GB RAM + 16GB internal memory With optional microSD, expandable up to 64GB	1.5GB RAM + 16GB internal memory With optional microSD, expandable up to 64GB
Dimensions	131,1 x 225,1 x 13,6 mm, thinnest Zone 2 tablet - 13,6 mm	131,1 x 225,1 x 13,6 mm, thinnest Zone 2 tablet - 13,6 mm
Weight	562,1 g	495 g
Display	8 inch TFT display with 1280 x 800 pixels Z2/ DZ2: This device is protected by a special protective screen for use in Zone 2	8 inch TFT display with 1280 x 800 pixels Z2/ DZ2: This device is protected by a special protective screen for use in Zone 2
Environmental	Operating temperature -20 ... +55 °C	Operating temperature -20 ... +55 °C
WWAN	LTE * (4G) Category 4: 800 / 850 / 900 / 1800 / 2100 / 2600 UMTS (3G) / HSPA (3.5G): 850 / 900 / 1900 / 2100 GPRS / EDGE (2G): 850 / 900 / 1800 / 1900	LTE * (4G) Category 4: 800 / 850 / 900 / 1800 / 2100 / 2600 UMTS (3G) / HSPA (3.5G): 850 / 900 / 1900 / 2100 GPRS / EDGE (2G): 850 / 900 / 1800 / 1900
Bluetooth	Bluetooth SmartReady LE 4.0	Bluetooth SmartReady LE 4.0
Wireless LAN	WiFi 802.11 a/b/g/n	WiFi 802.11 a/b/g/n
Power	11 hours battery life / 4450 mAh	11 hours battery life / 4450 mAh
Camera	3 MP with rear camera Flash with Barcode Scanner capability 1.3 MP front camera	3 MP with rear camera Flash with Barcode Scanner capability 1.3 MP front camera
Security	Samsung KNOX • EMM (MDM+IAM) • Secure file management • H/W & S/W Secure platform	Samsung KNOX • EMM (MDM+IAM) • Secure file management • H/W & S/W Secure platform
Programmable keys	Yes	Yes
Certification	**ATEX and IECEx certification:** II 3G Ex ic IIC T5 Gc // Ex ic IIC T5 Gc	**NEC certification:** Class I, Division 2, Groups A-D

*   depending on carrier & regional availability

The launch of ecom's new Tab-Ex® 01 tablet family enables a paradigm shift in the way mobile workers work and interact with each other, their remote experts, and the backend systems. This way of working brings with it the opportunity for improved decision making, improved mobile worker collaboration, increased efficiency and improved data quality related to work tasks performed in hazardous areas.

This solution provides compatibility with a wide range of preloaded applications for a safer work environment, including unparalleled security functions like device encryption, MDM, VPN and secure connectivity (Samsung KNOX).

Tab-Ex® 01

Tab-Ex® 01 - Z2 / D2

PROFESSIONAL

Meet the new Tab-Ex® 01
Designed to deliver powerfully versatile performance and secure operations, the Tab-Ex 01 is a stylish, portable tablet device that is ready to go anywhere to get the job done. A portable tablet built for the enterprise world.

The Tab-Ex® 01 comes with a specialized cover that protects the device from extremes and is in full compliance with U.S. military anti-shock standards (MIL-STD 810G). That means the Tab-Ex® 01 is capable of with standing the toughest of shocks, enduring everything from the continuous minor bumps and bruises of everyday usage to more severe drops of up to 1.2 meters, even on solid concrete.
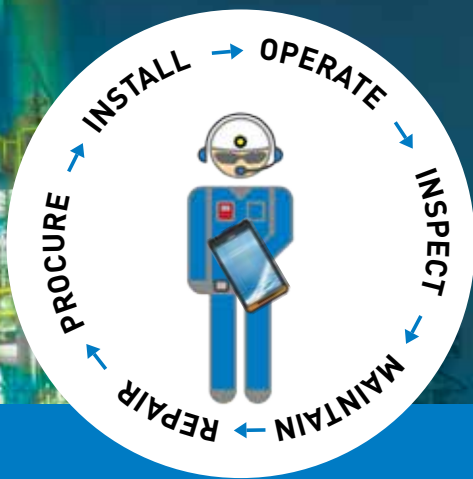
ENTERPRISE READY RIGHT NOW

However challenging the surroundings may be, the Tab-Ex® 01 can always be counted on for professional, on-demand performance, featuring top-tier data security and seamless operations.

STAY PROTECTED
IN ANY ENVIRONMENT

- Protected against accidental drops up to 1.2 meters (with protective cover)
- Dust and water resistance (IP67 certified)

ROBUST AND RELIABLE
TABLET FOR FIELD SERVICE

ecom
MOBILE SAFETY

INSTALL → OPERATE → INSPECT → MAINTAIN → REPAIR → PROCURE → INSTALL

▶ **Ensuring and maximizing mobile worker´s efficiency & productivity**

▶ **Ensuring accurate data capture and real-time information and decision making**

▶ **Minimizing costs**

▶ **Improve ease of use & customer experience**

SAMSUNG KNOX WORKSPACE

Samsung KNOX Workspace provides robust, hardware and software integrated security for Samsung mobile devices. KNOX Workspace offers multi-layered protection from the device down to the kernel with two-factor biometric authentication for authorized device access.Plus, an enhanced KNOX framework and Microsoft Workplace Join provide users with a secure channel to corporate resources from mobile devices.

The device has also been tested with all common MDM systems like

- SureLock
- Airwatch
- SOTI MobiControl
- SAP AfariaMDM
- Mobileiron
- Citrix XenMobile

Samsung Knox

Tab_-Ex® 01

Bluetooth® SMART READY

Barcode Scanner

IP 64

24/7

SLIM AND STYLISH.
LIGHT AND PORTABLE.

With its protective cover, the Tab-Ex® 01 boasts a stylish design that sets new standards for what a solidly built device should look like. Naturally, it is light enough to give professionals the easy portability they demand when they transition from the office to the field.

FLEXIBILITY AND PRODUCTIVITY

The Tab-Ex® 01 is a true mobile device built for performance and productivity on the go. It comes packed with a large capacity 4,450mAh battery that has plenty of power for a full day of use (11 hours) that can easily be replaced with a spare.

The Tab-Ex® 01 also features Samsung's exclusive Ultra Power Saving Mode, allowing it to run for days without shutting down. And with a wide range of connectivity options, business professionals working outside the office can stay connected with their clients and colleagues at all times. From HEXA-Band LTE* support for global travelers, to Wi-Fi and Bluetooth, it provides seamless connectivity.

*   depending on carrier & regional availability

ONE GLOBAL PLATFORM
ENABLING MOBILE WORKFORCE PARADIGM SHIFT

3.1 MP REAR FACING CAMERA WITH AUTO FOCUS AND FLASH

The fast and accurate 3.1 megapixel rear-facing auto focus camera lets enterprise users capture high quality images for situational reports about what is happening on the job site. Tab-Ex® 01 also can be optionally enhanced with an exclusive barcode solution developed together with Honeywell for easy barcode scanning.

A PEN FOR EASIER INPUT

Professionals that wear gloves in the field will appreciate the built-in capacitive Pen that's slotted thoughtfully at the top of the protective cover. It's easy to access and use, and makes data input even easier.

NFC CONNECTIVITY

The Tablet supports NFC connectivity for reading and writing. NFC tagging makes it easy to check personnel attendance, and can be used in multiple logistics scenarios as well.

Camera

SUPPORT

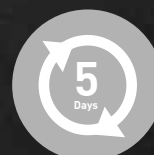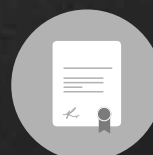Support makes all the difference: Being your partner, we provide professional solutions.

Not only before and during, but particularly after the sale and during the daily use of our products, it is crucial that you rely on our mobile devices each and every day. To ensure this, ecom will provide you with professional assistance and customer care worldwide.

SERVICE CONTRACT

By signing up for our ecomprehensive service package, we offer you a guaranteed turnaround time of five working days at our worldwide ecom Service Centers in Germany, United States of America and Singapore

- Free servicing as part of the service contract
- Predictable costs
- Minimal downtime
- Professional solutions with the guarantee you need.

High flexibility.
Ergonomic operation.
Excellent performance.

Bluetooth Scanner
for Hazardous Areas

ecom
A PEPPERL+FUCHS BRAND

Your automation, our passion.

PEPPERL+FUCHS

Ident-Ex® 01

BENEFITS

- Ultra-rugged
- Outstanding head modules performances
- Easy to use, with one hand
- Pairable with any Bluetooth device
- Flexibility – online / offline scanning & changeable head modules
- Lower risk interface to ecom products
- Lower cost – prevents legacy tag replacement
- Ideal for intensive scanning and 12 hour shifts
- Lower damage / fouling risk = lower downtime risk
- Improved global safety & lower inventory cost
- Optional Service Level Agreement 3 years (SLA)

MODULAR HEAD DESIGN

Using an unique modular design, Ident-Ex® 01 can be specifically configured to the customer's requirements by selecting differenthead modules. When requirements change, the head module on the unit can be replaced by one of the ecom-approved Service Centres. For an overview of all currently available head modules, please have a look in the Ident-Ex® 01 configurator on **https://www.ecom-ex.com.**

CERTIFICATION

ATEX	⟨Ex⟩ II 2G Ex ib IIC T4 Gb IP64
	⟨Ex⟩ II 2D Ex ib IIIC T135°C Db IP 6X
IECEx	Ex ib IIC T4 Gb IP64
	Ex ib IIIC T135°C Db IP 6X
NEC & CEC	Class I, II, III Div. 1 Groups A-G, T4, T135°C
	Cl I Zn 1, AEx ia IIC T4 Gb IP64
	Cl II Zn 21, AEx ia IIIC T135°C Db IP64
	Ex ia IIC T4 Gb
	Ex ia IIIC T135°C Db

BLUETOOTH
SCANNER, READER & IMAGER

ecom
A PEPPERL+FUCHS BRAND

HEADMODULE

1 BARCODE
2D Multi-Range Barcode Imager
1D Laserscanner

2 RFID
LF 125 / 134 KHz
HF 13,56 MHz
UHF 868 MHz
UHF 915 MHz

3 RFID & 1D COMBIMODULE

SCOPE OF DELIVERY

- Ident-Ex® 01
- Head module
- Charging cable
- Travel charger
- Instruction manual
- Safety instructions

ACCESSORIES

- Leather holster
- Hand strap
- Retractable lanyard
- Docking station
- Software application
- Leather case for retractable lanyard

Bluetooth Scanner **Ident-Ex® 01**
ATEX / IECEX ZONE 1/21, NEC/CEC CLASS 1 DIVISION 1

TECHNICAL SPECIFICATIONS

Dimensions	**With Ex-25 head module**: 235 x 84 x 58mm **Remaining head modules:** 221 x 84 x 58mm
Weight	425-560g (depends on head module)
Battery	Li-Ion rechargeable; 12+ hours; 10.000+ scans with one battery charge
Internal Storage	Offline Batchmode 2 MBytes, 2D QR barcodes = 500+, RFID tags (ID only) = 500+
Bluetooth	Class II, up to approx. 10 meters
Scan Performance	RFID[1] = up to 1.5m Barcode = 15 cm to 15 m

1 Tag & environment dependent

Connectivity via Bluetooth