ASSURED
SYSTEMS

ecom
A PEPPERL+FUCHS BRAND

World´s first Zone 1/21 & DIV 1 Tablet

Tab-Ex® 01 Series

FOR HAZARDOUS AREAS
RUGGED / D2 / DZ2 / DZ1

S Designed for SAMSUNG

Tab-Ex® 01 Series

WORLD´S FIRST ZONE 1/21 & DIV 1 TABLET COMPUTER BASED ON SAMSUNG GALAXY TAB ACTIVE

ecom's hazardous area tablet, the Tab-Ex® 01, leverages Samsung's know-how and brings a new level of customer focused solutions and increased 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 offering an entire family of compatible tablets, peripherals and accessories suitable for worldwide use in Zone 1/21 & DIV 1, Zone 2 / DIV 2, and rugged environments.

MORE POSSIBILITIES WITH TAB-EX® 01

The Tab-Ex® 01 is suitable for multiple mobile worker roles performing a range of tasks, such as Asset Surveys, Material Tracking, Operator Rounds, Inspection, Data collection and Plant Maintenance. The 8-inch screen enables the wide range of applications to become mobile in hazardous areas, allowing workers to view and interact with SCADA/DCS systems, enterprise systems (SAP, Maximo s.o.), project management systems and computer aided design systems.

Built-in cameras (optional) and a full range of wireless capability allows equipment defects to be captured during inspection and maintenance operations, and instantly visible to those who need to diagnose the issue and determine the follow-on actions.

ASSURED Q®
SYSTEMS

ecom
A PEPPERL+FUCHS BRAND

ONE GLOBAL PLATFORM

ENABLING MOBILE WORKFORCE PARADIGM SHIFT

ecom
app
library

www.ecom-ex.com/apps

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.

MOBILE COMPUTING

ecom´s development of the ultra-rugged Tab-Ex® 01 includes numerous new patents and is built on the Samsung GALAXY Tab Active platform - allowing you to benefit from this device in both harsh and hazardous environments. 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). Being able to offer the same internal tablet, The Samsung GALAXY Tab Active device, ecom provides a key benefit of consistency no matter which product you use - whether Zone 1/21 & DIV 1, Zone 2 / DIV 2 or rugged. Any software applications developed or licensed for the Samsung Galaxy Tab Active will work unchanged on the Tab-Ex® 01.
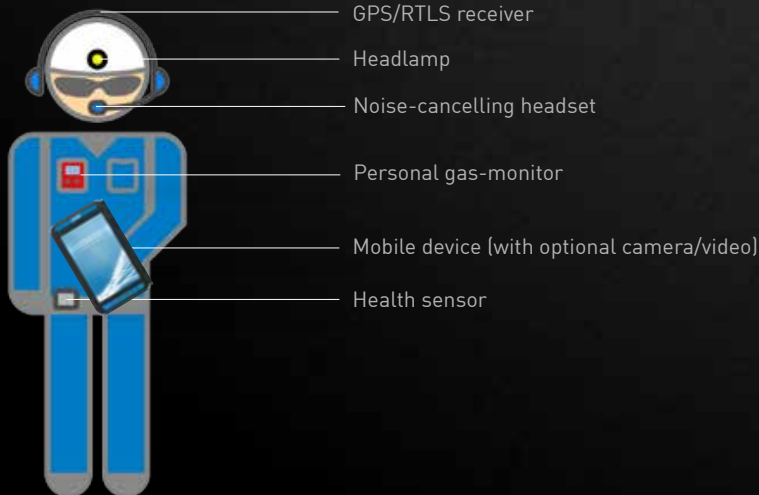
3

Tab-Ex® 01 Series

Bluetooth®

CONNECTIVITY – FAST AND FLEXIBLE

As private 4G / LTE wireless connectivity is increasingly adopted within hazardous areas, Tab-Ex® 01 ensures access is fast and seamless – enabling users to quickly access the information needed to perform the task at hand. And, for sites with WiFi access or no wireless access, Tab-Ex® 01 provides the flexibility to meet your needs - preventing costly infrastructure updates.

Central to ecom´s Mobile Worker concept, up-to-date Bluetooth standards are also supported by Tab-Ex® 01, allowing real-time connectivity to both Bluetooth SmartReady Low Energy 4.0 (BLE) devices as well as older legacy Bluetooth devices. This allows the mobile worker to benefit from expanded Tab-Ex® 01 capabilities such as data collection and measuring/monitoring devices, headsets, AutoID, and Bluetooth Beacons for localization.
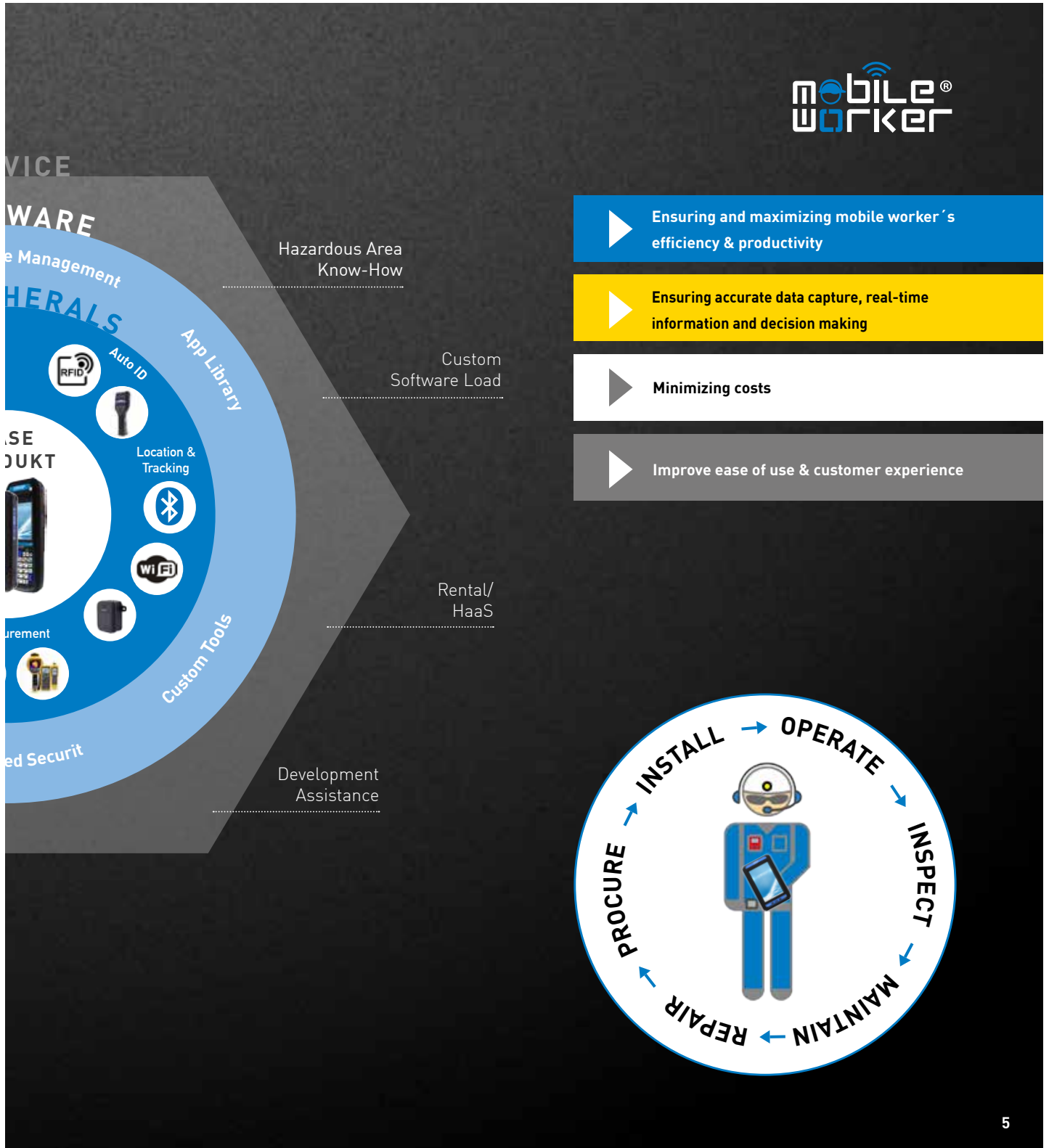
MOBILE WORKER

- GPS/RTLS receiver
- Headlamp
- Noise-cancelling headset
- Personal gas-monitor
- Mobile device (with optional camera/video)
- Health sensor

Training

Consultancy

Emergency Swapout

Service Level Agreement

SER
SOFT
Mobile Device
PERIP
Driver Development
Collaboration
Health & Protection
Kiosk Mode
BA
PROD
Measu
Enhanc

ECOM´S MOBILE WORKER CONCEPT

- Ensuring and maximizing mobile worker´s efficiency & productivity
- Ensuring accurate data capture, real-time information and decision making
- Minimizing costs
- Improve ease of use & customer experience

Hazardous Area Know-How

Custom Software Load

Rental/ HaaS

Development Assistance

5

Tab-Ex® 01 Series

WHY USE ZONE 1/21 & DIV 1 DEVICES ?
SAFETY FIRST

When developing products for Zone 1/21 & DIV 1 hazardous areas, where explosive gas or dust may be present, a simple "protective case" approach is a major risk to the site since it cannot prevent an explosion under all conditions, such as fault operation, which is a key requirement for mobile devices used in these areas. This is why ecom has worked collaboratively with Samsung to develop the World's first intrinsically safe tablet, which is completely safe for use in Zone 1/21 & DIV 1 hazardous areas.

Even if considered safe to use in hazardous area, it does not mean it is intrinsically safe / explosion proof unless:

1) the device has correct rating "Ex ic", "Ex ia" or "Ex ib" or either "UL913", "FM3160", "CSA157" and
2) it has the required certification marking

Evaluate the risk and check your mobile device - you, and more so, your safety officer or insurance company may be surprised. Do they bear the risk carrying a Zone 2 / DIV 2 rated or even a rugged device into Zone 1/21 & DIV 1 hazardous area?

Safety (employees, assets, environments) is priority number one when carrying even unintended or switched off any electronic device in to environments with explosion risks. Since even Zone 2 equipment is "only required to be safe under normal operation conditions" any fault could cause an explosion in the occassion of an explosive atmosphere.

Essentially only equipment certified for use in Zone 1/21 & DIV 1 area does employ any safety circuits or factors of safety in the event of potential failure and passes extreme test conditions.

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. Using an MDM system ecom customized configurations offers.

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.

ZONE 1 / DIV 1 TESTING EXCERPT

- Thermal endurance testing – samples placed within an environmental tests chamber and subjected to 4 weeks endurance to extreme heat and humidity then 1 day extreme cold

- Impact tests – the samples were then subjected to impact test mass from various heights

- Drop tests - the samples were then subjected to drop testing on to a concrete floor numerous times from heights of 1 meter

- Overpressure and Flame propagation test - the samples were then subjected to hydrostatic overpressure testing to ensure the enclosure strength and integrity followed by an internal explosion of test gases to ensure non-transmission of the internal flames to the exterior

- Ingress protection - Several other samples with subject to the first three tests listed above were then subjected to water and dust protection tests to level IP64

6

DESIGN & ENGINEERING
BREAKTHROUGH

Tab-Ex® 01
Built and certified for hazardous areas

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 and listed with all common MDM systems like

- SureLock
- Airwatch
- SOTI MobiControl
- SAP AfariaMDM
- Mobileiron
- Citrix XenMobile
- Samsung SDS CellWe EMM

FLEXIBILITY AND PRODUCTIVITY

The Tab-Ex® 01 is a true mobile device built for performance and productivity on the go.

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

7

Tab-Ex® 01 Series

1D **2D**
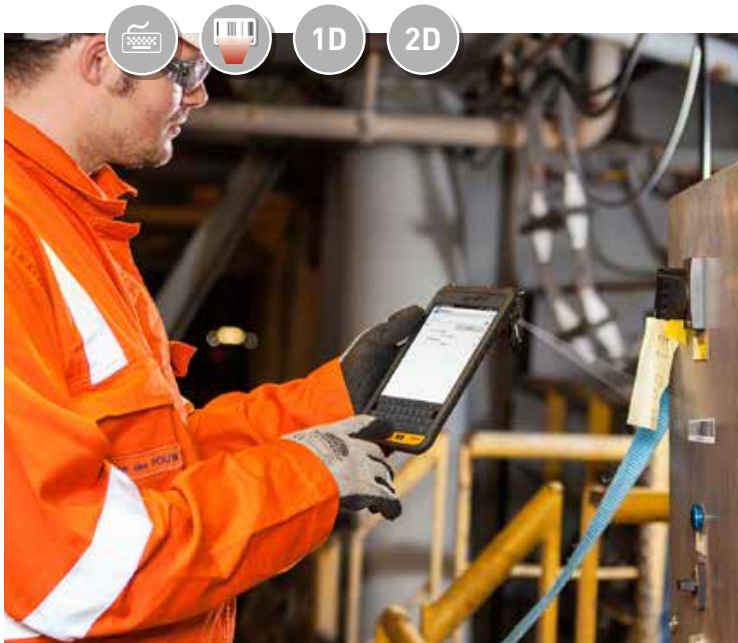
SOFTWARE BARCODE SCANNER

The ecom CamScan is a "keyboard wedge" software utility based on Honeywell´s **SWIFT**DECODER *Mobile™* a professional offline barcode decoder software, which uses the integrated front / rear camera to scan barcodes, automatically converting them to human readable text. Triggering the scan is easy - simply press the Scan button added to the on-screen keyboard. Audible and vibration feedback is given when the barcode has been decoded. And, the decoded barcode data automatically appears in the data field where you need it.

Choose software scanning for a low to medium frequency scanning, where low light and high motion are not an issue.

CamScan Keyboard
for Tab-Ex® 01 & Smart-Ex® Series / Ex-Handy 209

ADVANTAGES OF CAMSCAN SOFTWARE

- Uses integrated front / rear cameras - no additional hardware needed
- Fast & accurate decoding of a wide variety of 1D and 2D barcodes (even offline)
- Decodes most dirty/damaged barcodes
- Good performance in both sunlight and poor light conditions
- Can even read DPM codes

BENEFITS

- Improves accuracy & reduces manual typing
- Eliminates the need to copy & paste data
- Hardware & software cost savings
- Easy integration with existing software

8

PREMIUM
DATA CAPTURE

ecom
A PEPPERL+FUCHS BRAND

Auto ID without limits

Supports i.roc® Ci70 -Ex head modules

IDENT-EX® 01 SCANNER & READER (RFID & BARCODES)

If data capture is proving a challenge and you need a powerful and professional solution, you should turn to the **Ident-Ex®.**

IDENT-EX® SCAN HANDLE

Using an unique modular design, Ident-Ex® 01 can be specifically configured to the customer's requirements by selecting different head modules. Even if requirements change, the head module on the unit can be replaced by one of the ecom -approved Service Centers.

ADVANTAGES OF IDENT-EX®

- Ultra-rugged
- Easy to use, with one hand
- 10.000+ scans with on battery charge
- RFID= up to 1,5 m
  Barcode= 15 cm to 15 m
- Combi-Headmodules available with 2 separate buttons on the handle
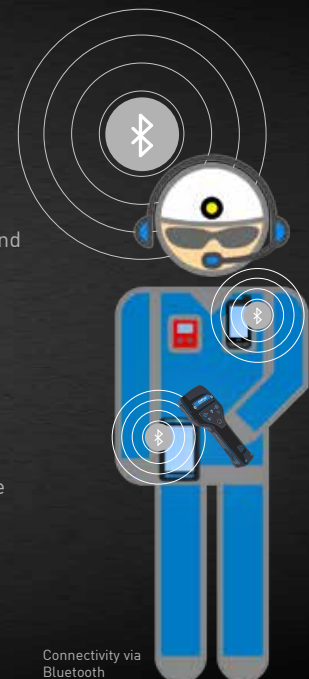
Connectivity via Bluetooth

9

ASSURED SYSTEMS

Tab-Ex® 01 Series

	Rugged (Non-Ex)	D2	DZ2	DZ1
Operating System				
Android™ 5.1.1	✓	✓	✓	✓
Android™ 4.4	✓	✓	✓	✓
Quad core 1.2 GHz processor	✓	✓	✓	✓
1.5GB RAM + 16GB internal memory	✓	✓	✓	✓
expansion with 64GB microSD-Card (optional)	✓	✓	✓	✓
8 inch TFT display with 1280 x 800 pixels	✓	✓	✓	✓
Dimensions	126,2 x 213,1 x 13,8 mm	131,1 x 225,1 x 13,6 mm	131,1 x 225,1 x 13,6 mm	162,1 x 256,0 x 33,3 mm
Operating temperature	-20...+55 °C	-20...+55 °C	-20...+55 °C	-20...+50 °C
Wireless capability with				
• WLAN	✓	✓	✓	✓
• WWAN (UMTS, HSPA, LTE*) *Change mobile SIM card*	✓ (optional)	✓ (optional)	✓ (optional)	✓ (optional)
• Bluetooth Smart Ready	✓	✓	✓	✓
• NFC	✓	✓	✓	✓
Front and rear camera				
• 3 MP with rear camera Flash with Barcode Scanner capability	✓	✓	✓	✓ (optional)
• 1.3 MP front camera	✓	✓	✓	✓ (optional)
Reinforced security with Samsung KNOX				
• EMM (MDM+IAM)	✓	✓	✓	✓
• Secure file management	✓	✓	✓	✓
• H/W & S/W Secure platform	✓	✓	✓	✓
Power (up to 11 hours battery life / 4450 mAh)	✓	✓	✓	✓

	Rugged (Non-Ex)	D2	DZ2	DZ1
ATEX	-	-	ⓔ II 3G Ex ic IIC T5 Gc T_a = -20°C to +55°C	ⓔ II 2G Ex db ia op is IIC T5 Gb ⓔ II 2D Ex tb IIIC T100°C Db T_a = -20°C to +50°C
IECEx	-	-	Ex ic IIC T5 Gc T_a = -20°C to +55°C	Ex db ia op is IIC T5 Gb Ex tb IIIC T100°C Db T_a = -20°C to +50°C
NEC	-	Class I, Division 2, Groups A,B,C,D, T4 Class I, Zone 2, Group IIC, T4 T_a = -20°C to +55°C	Class I, Division 2, Groups A,B,C,D, T4 Class I, Zone 2, Group IIC, T4 T_a = -20°C to +55°C	**US:** Class I, II, III, Division 1, Groups A-G T5 Class I, Zone 1 AEx db ia op is IIC T5 Gb Zone 21 AEx tb IIIC T100°C Db T_a = -20°C to +50°C

*depending on carrier & regional availability

ASSURED
SYSTEMS

ecom
A PEPPERL+FUCHS BRAND

RUGGED (NON-EX)

D2

DZ2

DZ1

SCOPE OF DELIVERY
DZ1 AND **DZ2 / D2**

- Tab-Ex® 01
  incl. battery 4450mAh

- *Camera
  (optional / depending on
  configured Tab-Ex® 01)

- Charger
  (EU, UK, US or AU)

- 64 GB microSD-Card
  (optional / depending on
  configured Tab-Ex® 01)

- Stylus Pen ST 01
  + Holder

- Safety Box SB T01 (only DZ1)

- USB Cable PC T01

- *WWAN
  (optional / depending on
  configured Tab-Ex® 01)

- Documentation

DC T01 X2 (Desktop Charger 5-Bay)	**HA T01 X2R** (Hand Strap Rotating)	**LC T01 X2** (Leather Case)	**VH T01 X2** (Vehicle-Holder)

LC T01 X1 (Leather Case)	**DS T01 X1** (Docking Station)	**CH T01 X2** (Chest Harness)	**WH T01 X2** (Wall-Holder)

VH T01 X1 (Vehicle-Holder)	**CH T01 X1** (Chest Harness)	**3M™ PELTOR™ WS™ ProTac XP Ex**	**EX-RSM AURELIS BT SPEAKERMIC**	**SMART MUFF**

FOR ALL DEVICES

*functions, not content

EMEA

Germany (Headquarters) [1]
ecom instruments GmbH
Industriestraße 2
97959 Assamstadt
Phone   +49 62 94 42 24-0
Fax   +49 62 94 42 24-100
sales@ecom-ex.com
[1] also covering Austria

ecom Benelux [2]
ecom instruments BV
Watertoren 45c
3247 CL Dirksland, Netherlands
Phone +31 1 87 60 59 16
Fax   +31 1 87 60 33 47
info.nl@ecom-ex.com
[2] also covering Belgium and Luxemburg

France [3]
Pepperl+Fuchs EURL
Division Mobile Safety
4 rue Ettore Bugatti
67201 Eckbolsheim (France)
Tél : +33.3.88 76 46 84
mobile-safety@fr.pepperl-fuchs.com
[3] also covering Algeria, Egypt, Morocco

Italy
ecom instruments srl
Via Gandhi, 15 Galleria
20017 Rho (MI)
Phone   +39 02 93 90 92 16
Fax   +39 02 93 90 62 97
info.it@ecom-ex.com

Switzerland
ecom instruments GmbH
Merkurstraße 2
6210 Sursee
Phone   +41 4 19 21 60 00
Fax   +41 4 19 22 00 08
info.ch@ecom-ex.com

Nordics
ecom instruments GmbH
Postbox 304
2970 Hørsholm
Denmark
Phone +45 28 252 575
info.nordics@ecom-ex.com

United Kingdom
ecom instruments ltd
A310, The Wilton Centre,
Redcar, TS10 4RF,
United Kingdom
Phone   +44 1642 46 54 00
Fax   +44 1642 46 54 02
info.uk@ecom-ex.com

Middle East
ecom instruments fze
P.O. Box 8918
Saif-Zone, Sharjah, UAE
Phone   +971 6 5 57 34 30
Fax   +971 6 5 57 34 31
info.uae@ecom-ex.com
[4] also covering Tunisia and Libya

Americas

USA
ecom instruments Inc.
1779 Westborough Drive, Suite 102
Katy, Texas 77449
Phone   +1 281 496 59 30
Fax   +1 281 496 23 21
sales.us@ecom-ex.com

Asia

South East Asia
ecom Instruments (SEA) Pte Ltd
15 Pioneer Turn
P+F GDC Building
Singapore 627577
Tel: +65 6779 9078

Part. No. 306049 / E0000699 / 7.000 / 03 / 17 · WEEE-Reg.-Nr. DE 934 99306 · 07/ 2017 Subject to modifications

Locate your nearest ecom partner on **www.ecom-ex.com** & **www.pepperl-fuchs.com**

Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

US

sales@assured-systems.com

Sales: +1 347 719 4508
Support: +1 347 719 4508

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050
Support: +44 (0)1785 879 050

Unit A5 Douglas Park
Stone Business Park
Stone
ST15 0YJ
United Kingdom

VAT Number: 120 9546 28
Business Registration Number: 07699660