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DERRICK
INTERNATIONAL

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ecom
MOBILE SAFETY



Mobile Phones | Two Way Radios | Headsets

HARD-LINE COMMUNICATION -
IN HAZARDOUS AREAS



COMMUNICATION

MOBILE PHONES | TWO WAY RADIOS | HEADSETS

ANYTHING -
BUT ORDINARY

ecom
MOBILE SAFETY



ZONE 1/21 DIV. 1

ZONE 2/22 DIV. 2



NO QUESTIONS ASKED

A three-year „No-Questions-Asked“ warranty for all new ecom mobile phones guarantees absolute cost certainty and shows our confidence in terms of quality and reliability of the product.

WE DON'T ASK, WE ACT!

For a full three years, ecom will guarantee free repairs including all spare and worn parts (except batteries) with a five-day turnaround.



Intrinsically Safe mobile phones from ecom instruments

The new top-of-the-range model Ex-Handy 08 is designed for Zone 1 and is ecom instruments' first UMTS-enabled mobile-phone. The Ex-Handy 08 (see page 4) provides high performance capability and guarantees software compatibility as well as network compatibility.

ANTENNA

Thanks to the integrated antenna the Ex-Handy displays excellent reception and above average network coverage. The Ex-Handy 08 currently is the only Ex-device worldwide with proven network and software compatibility.

DISPLAY

The high-resolution display is protected by rugged and scratch-resistant Gorilla Glass. To ensure smooth functionality of the device, different battery capacities with separate charging options and spare batteries are available.

BATTERY

To ensure smooth functionality of the device, different battery capacities with separate charging options and spare batteries are available.



CONNECTIONS

All connections are designed so that they remain tight and reduce risk, should the closing tab be unintentionally left open.

WORLDWIDE SAFETY

ecom's versatile mobile-phones are specially designed for use in hazardous areas of Zone 1/21 division 1 as well as Zone 2/22, division 2 and are approved worldwide. The Ex-Handy is very well suited for international use. For use in Zone 2/22, division 2 ecom provides the new Ex-HSPA 08 with near field communication.

SELECT YOUR PHONE ACCORDING TO YOUR REQUIREMENTS

Depending on the configuration, the Quadband cell-phone combines many more features than just making and receiving calls, as there is also:

- a personal alarm signal-system
- a camera with video function
- an LED Flashlight and
- walkie-talkie communication (push-to-talk).

Smart-Ex[®] 01

EXPERIENCE THE
SMART-EX[®] 01 SMARTPHONE



ZONE 1 / 21, ZONE 2 / 22
CLASS 1 / DIV 1
CLASS 1 / DIV 2

Intrinsically Safe Smartphone **Smart-Ex[®] 01**
THE LATEST INNOVATIVE PRODUCT IN ECOM'S MOBILE COMMUNICATION RANGE

RANGE OF FUNCTIONS

- 4G/LTE cellular network connectivity
- Android™ 4.4 (Kitkat) - Latest Android operating system
- 4.0" capacitive multi-touch screen made of extreme shock and scratch resistant Gorilla Glass® 2
- Glove Touch Screen
- High Visibility Display in Direct Sunlight
- 8MP rear camera with auto focus and LED flash with torchlight function and 1MP front camera (optional)
- 3600 mAh Li-Ion battery pack
- Bluetooth® 4.0 incl. BLE (Bluetooth Low Energy) BLE (30 times faster, 1/100th of power)
- WiFi 802.11 a/b/g/n
- Magnetic and waterproof USB 2.0 High Speed connector
- IP68 - Dust proof, water proof
- Push-to-talk (App solution)
- Lone Worker Protection (App solution)
- Optional Service Level Agreement (SLA)



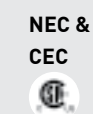
CERTIFICATION



Ⓜ II 2 G Ex ib IIC T4 Gb IP64
Ⓜ II 2 D Ex ib IIIC T135°C Db IP6X



Ex ib IIC T4 Gb IP64
Ex ib IIIC T135°C Db IP6X



Class I, Division 1, Groups A-D T4
Class II & III, Div. 1, Groups E-G T4

SERVICE LEVEL AGREEMENT (OPTIONAL)

The optional SLA, offering a full 3 year warranty for all new ecom mobile phones, gives you Total Cost of Ownership certainty - demonstrating our commitment in terms of product quality and reliability.

Under this SLA, ecom guarantees free repairs, including all spare and worn parts (except batteries) with a five-day turnaround.



Smart-Ex[®] 01



MAKE ALL THE
DIFFERENCE

ANDROID™ 4.4 (KIT KAT®) - LATEST ANDROID OPERATING SYSTEM

ANDROID™ 4.4 enables this intrinsically safe device to be used in hazardous areas without any compromises compared to conventional Smartphones for these applications and many more:



- Collaborative Working
- Audits & Inspection
- Operator Rounds
- Asset Tracking
- Condition Monitoring
- Process Automation
- Indoor / Outdoor Tracking & Navigation
- Safety / Security Management
- Man Down - Lone Worker Protection
- Push to talk

4.0" CAPACITIVE MULTI-TOUCH SCREEN

Made of extreme shock and scratch-resistant Gorilla Glass® 2, the large display increases the workers productivity due to the larger work surface.
And, the brightness, sharpness and high resolution is easier on the eyes.
The multi-touch display remains easy and accurate to use, even when used with gloves or wet fingers.
Google Play Store certification provides access to more than 700,000 software applications. And, if you need your device to stay up to date, FOTA (Firmware Over The Air) does this automatically and securely - just as your personal phone does.

ALSO AVAILABLE

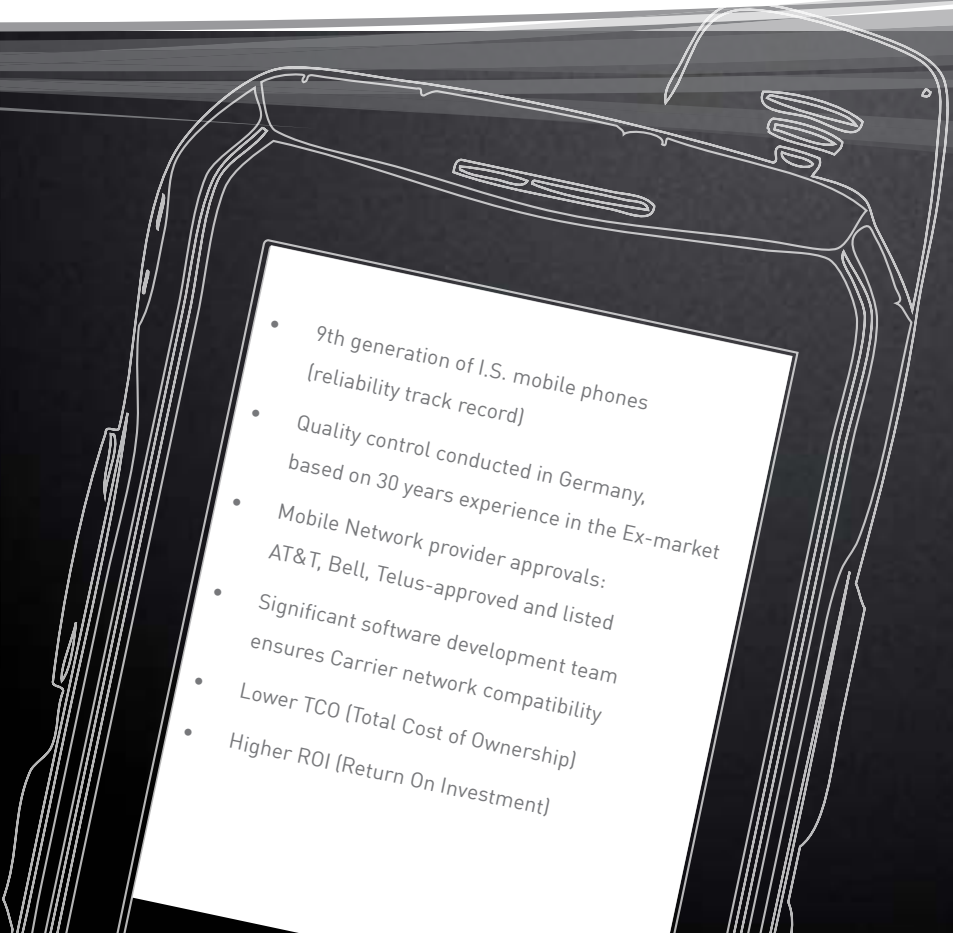
ZONE 2/22. DIV.2	EX-HANDY 09	ZONE 1/21. DIV. 1	ZONE 2/22. DIV.2	EX-HANDY 08	ZONE 1/21. DIV. 1
<ul style="list-style-type: none">• Android™ 4.4 Kitkat®• Keypad + Touchscreen• 4G LTE• Weight: approx. 330g			<ul style="list-style-type: none">• Nucleus• Keypad• 3G UMTS• Weight: approx. 200g		

WORKER SAFETY WITH SMART-EX 01

An ultra-rugged, LTE/ WiFi/ Android smartphone, the Smart-Ex® 01 comes with unrivalled features:

- Such as a touch screen that can be viewed in direct sunlight and easily used with dirty or wet work gloves.
- An extremely loud speaker, noise cancellation, a powerful battery, water and drop resistance and an optional 3-Year Service Level Agreement are just some features of the Smart-Ex® 01 that provide peace of mind to enterprises and workers alike.

- Access to productivity applications and worker safety as well as a full suite of industrial-grade accessories completes the solution.
In extreme and often dangerous working environments where every step is critical, you don't settle for less than the best – Smart-Ex® 01.



SCOPE OF DELIVERY

- Smart-Ex® 01
- Li-Ion battery 3600mAh (built-in)
- Charger TC S01
- Safety Box SB S01
- Belt Clip BC S01
- Needle (for opening SIM Slot)
- Documentation

Smart-Ex[®] 01



TECHNICAL DATA	
CORE PLATFORM / FUNCTIONS	
Operating System	Android 4.4
Chipset	MSM8926 1.2 GHz Quad core
Band	4G / LTE-standard EU: B1, B3, B7, B8, B20, B38 (TDD) Quad Band UMTS 850 / 900 / 1900 / 2100 MHz US: B1, B2, B3, B4, B5, B7, B8, B12, B14, B17 Quad Band GSM 850 / 900 / 1800 / 1900 MHz
Antenna	MIMO antenna for LTE
WiFi	802.11 a / b / g / n dual-band, WiFi Direct, WiFi Hotspot
Memory	16GB Internal Storage / 1GB RAM
User memory	12GB
Applications	Google Play
CONNECTIVITY	
Bluetooth SMS, MMS (text, image, audio, video)	BT4.0 / BLE (Low Energy) Support SMS and MMS
GPS, NFC	A-GPS, GLONASS, NFC
Languages supported	Arabic, Simplified Chinese, Croatian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Norwegian, Persian, Polish, Portuguese, Romanian, Russian, Spanish, Swedish, Turkish
Email Client	EAS, Gmail, POP3, IMAP
Capacity (mAh)	3600 mAh
Battery Life	Up to 1000 hours Stand by, up to 40 hours talk time
PHYSICAL CHARACTERISTICS	
Ambient temperature	-20°C.....+55°C
Protection class	IP68
Size	137 mm x 72.1 mm x 26,9 mm (5.39" x 2.54" x 1,05")
Weight	approx. 380 g
Dedicated Keys	PTT key / Alarm key / Power key
Ports	3.5 mm audio connector / Magnetic USB connector plug

DISPLAY	
Size	4.0 inch
Type	Corning Gorilla® Glass 2 with Glove Touch, Blanview Display
Resolution	WVGA (480x800)
Outdoor Visibility	Yes
Capacity	16.7 M color
Audio	
Microphone	Dual Mic Solution with Noise cancellation
Speaker	19 mm Loud Speaker with Gore® Protective Vents, Output up to 103 dB
MULTIMEDIA	
Audio Formats	MP3, WMA 9, AAC, ACC+, eAAC+, AMR-NB/WB
Video Formats	Support AVI, MP4, 3GPP
Media Player	Android native + GMS
FM Radio	Yes
Camera	8MP auto focus rear, 1MP fixed focus front
LED torch light	Yes

OPTIONAL ACCESSORIES / PERIPHERAL DEVICES




- Car charger
- Leather case
- Leather holster
- Single-bay desktop charger
- 4-bay desktop charger
- USB connector plug
- Stylus
- IS headset "ComCom Ex"
- IS in-ear noise reduction headset "Serenity SPC Ex"
- Bluetooth Remote Speaker Mic "Ex-RSM Aurelis BT"
- Non-IS stereo headset

Ex-Handy 09

EXPERIENCE THE
EX-HANDY 09 MOBILE PHONE

ecom
MOBILE SAFETY



CERTIFICATION	
ATEX 	<ul style="list-style-type: none"> II 2 G Ex ib IIC T4 Gb IP64 II 2 D Ex ib IIIC T135°C Db IP6X
IECEX 	<ul style="list-style-type: none"> Ex ib IIC T4 Gb IP64 Ex ib IIIC T135°C Db IP6X
NEC & CEC 	<ul style="list-style-type: none"> Class I, Division 1, Groups A-D T4 Class II & III, Div. 1, Groups E-G T4



**SLA +
Lone Worker
Protection
(optional)**

Intrinsically Safe Mobile Phone **Ex-Handy 09**

ZONE 1 / 21, ZONE 2 / 22, CLASS 1 / DIV 1, CLASS 1 / DIV 2

RANGE OF FUNCTIONS

- Touch Screen and Numeric Keypad
- High Visibility Display in Direct Sunlight
- 4G LTE cellular network connectivity
- Android™ 4.4 Kit Kat® Operating System
- Wifi 802.11 a/b/g/n with hotspot feature
- Long Battery Life
- Usable with gloves
- Powerful Loudspeaker
- Protection from micro particles
- Waterproof to IP68 standards
- High Shock/Vibration Resistance
- Extreme Temperature Resistance
- Resistant to extreme pressure
- High puncture resistance
- Resistant to most oils and chemicals
- Optional Service Level Agreement (SLA)

OPTIONAL ACCESSORIES / PERIPHERAL DEVICES

- Car charger
- Leather case
- Leather holster
- Single-bay desktop charger
- 4-bay desktop charger
- USB connector plug
- Stylus
- IS headset "ComCom Ex"
- IS in-ear noise reduction headset "Serenity SPC Ex"
- Bluetooth Remote Speaker Mic "Ex-RSM Aurelis BT"
- Non-IS stereo headset

SCOPE OF DELIVERY

- Ex-Handy 09 mobile phone
- Li-Ion battery 3600mAh (built-in)
- Charger TC S01
- Safety Box SB S01
- Belt Clip BC H09
- Needle (for opening SIM Slot)
- Documentation

Ex-Handy 09



TECHNICAL DATA	
CORE PLATFORM / FUNCTIONS	
Operating System	Android 4.4
Chipset	MSM8926 1.2 GHz Quad core
Band	4G / LTE-standard EU: B1, B3, B7, B8, B20, B38 (TDD) Quad Band UMTS 850 / 900 / 1900 / 2100 MHz US: B1, B2, B3, B4, B5, B7, B8, B12, B14, B17 Quad Band GSM 850 / 900 / 1800 / 1900 MHz
WiFi	802.11 a / b / g / n dual-band, with Hotspot feature
Memory	8GB Internal Storage / 1GB RAM
User memory	4GB
Applications	Google Play Store applications
CONNECTIVITY	
Bluetooth SMS, MMS (text, image, audio, video)	BT4.0 / BLE (Low Energy) Support SMS and MMS
GPS, NFC	A-GPS, GLONASS
Languages supported	Arabic, Simplified Chinese, Croatian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Norwegian, Persian, Polish, Portuguese, Romanian, Russian, Spanish, Swedish, Turkish
Email Client	EAS, Gmail, POP3, IMAP
Capacity (mAh)	3600 mAh
Battery Life	Up to 1000 hours Stand by, up to 40 hours talk time
PHYSICAL CHARACTERISTICS	
Ambient temperature	-20°C.....+55°C
Protection class	IP68
Size	137 mm x 65 mm x 26.9 mm (5.39" x 2.54" x 1.05")
Weight	approx. 330 g
Dedicated Keys	PTT key / Alarm key / Power key
Ports	3.5 mm audio connector / Magnetic USB connector plug

DISPLAY	
Size	2.6 inch
Type	Corning Gorilla® Glass 2 with Glove Touch, Blanview Display
Resolution	432 x 320
Outdoor Visibility	Yes
Capacity	16.7 M color
Audio	
Microphone	Dual Mic Solution with Noise cancellation
Speaker	19 mm Loud Speaker with Gore® Protective Vents, Output up to 103 dB
MULTIMEDIA	
Audio Formats	MP3, WMA 9, AAC, ACC+, eAAC+, AMR-NB/WB
Video Formats	Support AVI, MP4, 3GPP
Media Player	Android native + GMS
FM Radio	Yes
LED torch light	Yes

Ex-Handy08

ZONE 1 / 21

DIVISION 1



CERTIFICATION

ATEX



II 2G Ex ib IIC T4 Gb IP64
II 2D Ex ib IIIC T130°C Db IP6X

IECEX



North America (USA / Canada)
Ex ib IIC T4 Gb IP64
Ex ib IIIC T130°C Db IP6X

NEC



North America (USA / Canada)
Class I, Division 1, Groups A, B, C, D T4
Class II, Division 1, Groups E, F, G T4
Class III, Division 1

SCOPE OF DELIVERY

- Ex-Handy 08
- Rechargeable battery
- Battery charger TCH 07
- Safety box
- Belt clip
- Screwdriver
- Instruction manual
- Documentation

ZONE 1 / 21, DIV. 1



Intrinsically Safe mobile phone Ex-Handy 08

FOR ZONE 1 / 21, DIVISION 1

RANGE OF FUNCTIONS

- Bluetooth® 3.0 (DUN, OPP, SAP, HSP, HFP, FTP, A2DP, AVRCP, PBAP)
- 3G HSPA/GSM/GPRS/EDGE
- PUSH-TO-TALK (server-dependent)
- MMS
- Native e-Mail-client (POP3/SMTP, IMAP4)
- WAP 2.0 (XHTML) browser
- Java™ 2.0 ME (CLDC 1.1)
- Integrated Office functionality
- Contact, calendar and message synchronisation with MS® Outlook®
- Free software for data transfer and synchronisation
- A-GPS
- Lone Worker Protection (see page 8)
- Bright LED torch
- Rugged 2 megapixel camera with LED flash and video function (optional)
- Slot for microSD cards up to 16 GB
- Scratch and impact-resistant Gorilla-Glass™ display
- Vibration alert



LOYAL AND FAITHFUL

The accessories catalogue as well as ecom's professional support will be available for succeeding product models, including spare parts, within three years from discontinuation of the product family.

TECHNICAL DATA

Networks	Quad band GSM 850 / 900 / 1800 / 1900 MHz Triband UMTS/WCDMA band 1, band 4, band 8 (EU) or band 1, band 2, band 5 (US)
Data transfer	GPRS & EDGE class 12 HSDPA category 7/8 (7,2 mbits/s) HSUPA category 6 (5,6 mbits/s)
Display	5 cm (2 inch) LCD (240 x 320 pixels)
Power supply	1,280 mAh Li-Ion (SC battery) or 1,960 mAh Li-Ion (HC battery)
Talk /standby time	approx. 4,5 hrs / max. 250 hrs (with SC battery) approx. 7 hrs / max. 400 hrs (with HC battery)
Charging time	approx. 3 hrs / 4 hrs (SC / HC battery)
Dimensions	126 x 60 x 25 mm (5" x 2,4" x 1") without battery
Weight (including SC / HC battery)	approx. 200 g (7.1 oz) / 220 g (7.8 oz)
Ambient temperature Ta	-20 °C ... +55 °C (-4°F ... +131°F)
IP protection class	IP68 (30 minutes, 2 metres under water)

To help find your ideal mobile phone solution, head to www.intrinsically-safe-mobile.com and use our tailored product finder.

Ex-HSPA08

CERTIFICATION

ATEX
Ⓢ II 3G Ex ic IIC T4 Gc IP64
Ⓢ II 3D Ex ic IIIC T130°C Dc IP6X

IECEX
Ex ic IIC T4 Gc IP64
Ex ic IIIC T130°C Dc IP6X

NEC
North America (USA / Canada)
Class I, Division 2, Groups A, B, C, D T4
Class II, Division 2, Groups E, F, G T4
Class III, Division 2

SCOPE OF DELIVERY

- Ex-HSPA 08
- Rechargeable battery
- Battery charger TCH 07
- USB Data cable
- Belt clip
- Screwdriver
- Instruction manual
- Documentation



3G
(+)

PTT

NFC

IIIC



SAFETY
IN EVERY SITUATION

Intrinsically Safe mobile phone Ex-HSPA 08

FOR ZONE 2 / 22, DIVISION 2

RANGE OF FUNCTIONS

- 3G HSPA/GSM/GPRS/EDGE
- Bluetooth® 3.0 (DUN, OPP, SAP, HSP, HFP, FTP, A2DP, AVRCP, PBAP)
- NFC (Near Field Communication) (optional)
- PUSH-TO-TALK (server-dependent)
- MMS
- Native e-Mail-client (POP3/SMTP, IMAP4)
- WAP 2.0 (XHTML) browser
- Java™ 2.0 ME (CLDC 1.1)
- Integrated Office functionality
- Contact, calendar and message synchronisation with MS® Outlook®
- Free software for data transfer and synchronisation
- A-GPS
- Lone Worker Protection (see page 8)
- Bright LED torch
- Rugged 2 megapixel camera with LED flash and video function (optional)
- Slot for MicroSD cards up to 16 GB
- Scratch and impact-resistant Gorilla-Glass™ display
- Vibration alert

TECHNICAL DATA

Networks	Quadband GSM 850 / 900 / 1800 / 1900 MHz Triband UMTS/ WCDMA band 1, band 4, band 8 (EU) or band 1, band 2, band 5 (US)
Data transfer	GPRS & EDGE class 12 HSDPA category 7/8 (7,2 mbits/s) HSUPA category 6 (5,6 mbits/s)
Display	5 cm (2 inch) LCD (240 x 320 pixels)
Power supply	1,950 mAh Li-Ion
Talk /standby time	max. 24 hrs / max. 890 hrs
Charging time	approx. 4 hrs
Dimensions	126 x 60 x 25 mm (5" x 2.4" x 1") without battery
Weight (including battery)	approx. 199 g (7.1 oz)
Ambient temperature Ta	-20 °C ... +55 °C (-4°F ... +131°F)
IP protection class:	IP68 (30 minutes, 2 metres under water)

ZONE 2 / 22, DIV.2



LWP

PERMANENT PROTECTION - WHEREVER YOU ARE



WE'VE GOT IT - THE SOLUTION FOR YOU!

By opting for the Ex-Handy 08 LWP or the Ex-HSPA LWP (Lone Worker Protection) you are acquiring a reliable and rugged mobile device that ensures the safety of your workers around the world.

Many tasks are now being carried out by just one person to save costs (e.g. patrolling extensive works premises). At the same time, however, employers also need to ensure the safety of their employees when they are out on their own.

INTRINSICALLY SAFE MOBILE PHONE (LONE WORKER PROTECTION)

Our intrinsically safe mobile phones with LWP functionality have been specifically designed for the safety of people working alone. The focus of our development centred around fusing modern technology and personal emergency response devices to create a device that provides the upmost levels of safety. This phone is able to help locate anyone who has suffered an accident and immediately initiate the necessary measures.

This modern mobile phone is equipped with a separate alarm switch that allows help to be called in the event of danger. This lone worker phone is able to be programmed using the integrated 3D motion sensors which trigger for help when a worker is injured or in danger. A pre-alarm function allows employees to deactivate the alert to prevent false alarms. Alternatively, the phone can also be connected to popular security centres such as Bosch and Securitas, therefore ensuring safety at all times.

An alarm SMS can also be used to inform individuals or entire groups of employees quickly and effectively of any existing hazards and incidents. Continuous attention is drawn to this message via an audible alarm so that employees are made aware of its presence; they are then able to send the required acknowledgment of its receipt.

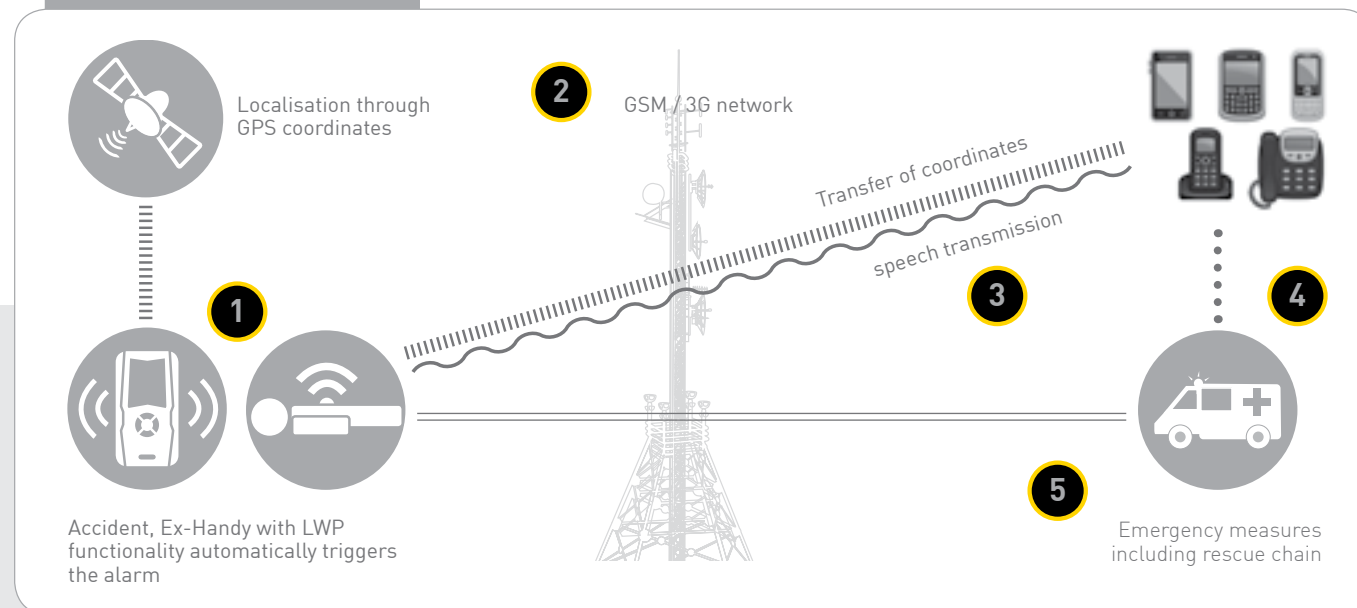
SAFELY SAVING COSTS

The personal emergency response device comes with all of the necessary alarms and locating functions, thereby helping you to protect your employees. At the same time it also satisfies commercial demands: the device will allow numerous tasks to be carried out by individual workers in the future, as the assistants previously required to help ensure safety are no longer required. This means that the deployment of a personal emergency response system will help users realise considerable cost savings and enable them to recoup their investment within just a few months.

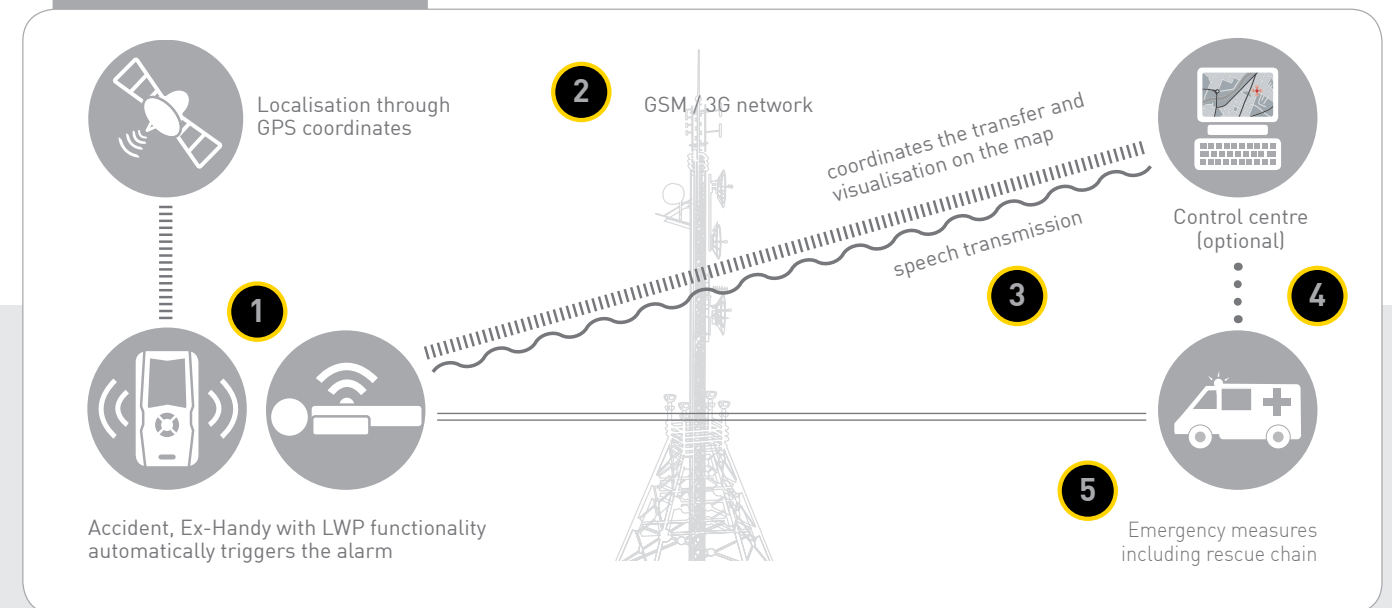
RANGE OF FUNCTIONS

- Lone worker protection and mobile phone in one
- Programmable 3D motion sensor for: Inclination alarm, impact alarm, escape alarm, man down alarm
- Programmable dead man's switch
- Alarm button to deliberately trigger alarms
- Technical alarms: E2E check, battery status, connection to GSM or 3G network
- Connection to renowned security centres also possible
- Alert for incoming messages with subsequent read receipt sent to the alarm control unit
- Visualisation of the alarm modes in the display
- Loud audible alarm
- Programmable geo zones
- Communication via SMS and GPRS

Basic Mode



System Mode



BASIC MODE

- 1 The lone worker suffers an accident or gets into a dangerous situation. The sensors in ecom's Ex-Handy with LWP functionality register this in accordance with the selected alarm modes.
- 2 The Ex-Handy with LWP functionality automatically triggers an emergency call. The emergency call can consist of a phone call and / or SMS and it can be sent to up to five different recipients and any type of phone. The SMS contains the GPS coordinates.
- 3 The Ex-Handy with LWP functionality simultaneously establishes vocal communication with the recipient of the emergency call. This enables the recipient to determine whether the injured employee is still responsive and / or what injuries he/she has suffered.
- 4 The recipient of the emergency call organises and/or coordinates additional measures and sets the chain of rescue in motion.
- 5 Rescue of the employee.

CUSTOMER-SPECIFIC SYSTEM MODE

- 1 The lone worker suffers an accident or gets into a dangerous situation. The sensors in ecom's Ex-Handy with LWP functionality register this in accordance with the selected alarm modes.
- 2 The Ex-Handy with LWP functionality then automatically sends an alarm to an internal control centre or an external service provider. In addition to transferring the coordinates, the site of the accident is also visualised on a separate map. This makes it immediately apparent where the employee is located.
- 3 The Ex-Handy with LWP functionality simultaneously establishes vocal communication with the recipient of the emergency call. This enables the recipient to determine whether the injured employee is still responsive and what has happened.
- 4 The processing (organisation and coordination) of the emergency call is safeguarded and documented in the System Mode. The rescue of the employee is thereby also guaranteed.
- 5 Rescue of the employee.

Accessories

DESKTOP CHARGER DCH

Charging cradle with DC-input for charging your intrinsically safe mobile phone and spare battery at the same time.



TECHNICAL DATA	
Dimensions	116 x 84 x 58 mm (4.6" x 3.3" x 2.3")
Weight	approx. 132 g (4.66 oz)
Input voltage	100V - 240V / 50-60 Hz / max. 200 mA
Output voltage	5V / max. 3100 mA
Charging time	max. 4h (depending on battery type and charging status)
Operating temperature	0 °C - +40 °C (+32 °F - +104 °F)
Storage temperature	-20 °C - +55 °C (-4 °F - +131 °F)

RANGE OF FUNCTIONS

- Powerful enough to maintain a short charge time when both the phone and spare battery are simultaneously charging. External wall plug transformer with exchangeable plugs.
- Ready-to-use. No additional Safety box needed.
- Cradle housing with rubber feet plus the possibility to screw it down.
- Spare battery lock mechanism meaning no need to fasten screws while charging.
- Notch for Torx T8 (Zone 1/Division 1 batteries) and slotted screwdriver (Zone 2/Division 2 & Generic (battery covers).
- Spare battery charge indicator via Dual color LED.
- Charging status of the mobile phone indicated on the phone's display incl. Auto LCD-off for energy saving.
- Function keys of the mobile phone accessible while cradle.
- Phone stays upright in the cradle for increased user comfort with LWP enabled devices.
- It makes 24/7 usage of your LWP device possible.

DCH

ALWAYS
READY TO USE



















DESIGNED FOR USE WITH




















- Ex-Handy 08
- Ex-Handy 08 LWP
- Ex-Handy 07
- Ex-Handy 07 LWP
- Ex-HSPA 08
- Ex-HSPA 08 LWP
- Ex-GSM 07
- All complementary Generic devices



- Ex-BPH 08 SC / HC
- Ex-BPH 07 SC / HC
- Ex-BPH 28
- Ex-BPG 07
- All complementary Generic batteries

BATTERIES EX-HANDY 08		BATTERIES EX-HSPA 08		
Ex-BPH 08 SC (ATEX / IECEx / NEC)	Ex-BPH 08 HC (ATEX / IECEx / NEC)		Ex-BPH 28 (ATEX / IECEx / NEC)	NFC- Battery cover (ATEX/IECEx)
				
A0000501	A0000502		A0050200	A0050220
CHARGER EX-HANDY 08 / EX-HSPA 08				
TCH 07 EU Charger	TCH 07 UK Charger	TCH 07 US Charger	TCH 07 AU Charger	TCH 07 CN Charger
				
A0002236	A0002237	A0002238	A0002239	A0002255
GENERAL ACCESSORIES ZONE 1 / DIV. I		GENERAL ACCESSORIES ZONE 2 / DIV. II		ZONE 1 & 2
SBH 07 Safety box	Screwdriver Torx 08	USB Data cable	Screwdriver	CCH 07 Car charger
				
A0002235	A0002226	A0000638	A0000639	A0002242
HEADSETS / SPEAKER				
ComCom Ex	Serenity SPC Ex	Stereo-Headset (non-Ex)	Ex-RSM Aurelis BT	
				
A0000960	AS000960	A0002241	A0002241	

 Applicable in the hazardous area

VEHICLE MOUNTS				
Phone holder	„Gooseneck“ vehicle mount, screw installation	„360° gooseneck suction mount“	Adapter plate for suction mount, 70 mm, self-adhesive	Adapter plate for suction mount, 70 mm, screwable
				
A0000193	A0000191	A0000188	A0000189	A0000190
Air vent mount				
				
A0000192				
LEATHER CASES		BELT LOOPS		
LCH 07 leather case with belt clip	LHH 07 leather holster	Belt loop for belts up to 45 mm wide	Belt loop with metal bracket incl. 12mm metal holder Stock	Belt loop for belts up to 65 mm wide
				
A0002225	A0002247	A0000128	A0000129	A0000132
BELT CLIPS				
Belt clip with fixed spring	Belt clip incl. 12mm holder	12 mm plastic holder for clips and belt loops	12 mm metal holder for clips and belt loops	BCH 07 Belt clip
				
A0000131	A0000127	A0000130	A0000133	A0002240

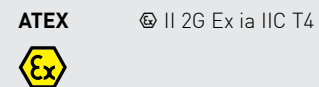
Ex-PMR 2000

ecom has developed a professional handheld radio specifically for your daily work in hazardous areas. The Ex-PMR 2000 offers safe and reliable voice communication in daily operation and even in emergency situations. Communicate simply and without risk with your colleagues – at any time in all situations.

The Ex-PMR 2000 can be used in the Zones 1 and 2. This professional radio operates in two different frequency bands and is available in either the VHF 136-174 MHz or the UHF 400-470 MHz version. The radio's transmission power has been limited to 1.2 watts for safe working in potentially explosive areas and initiating calls even over large distances.

In addition, the Ex-PMR 2000 complies with IP 64 and therefore satisfies high industrial demands on ruggedness and reliability, particularly in hazardous areas.

CERTIFICATION



SCOPE OF SUPPLY

- Ex-PMR 2000 U/V
- Rechargeable battery Ex-AM PMR 2000
- Belt clip
- Operating instructions

The CTCSS and DCS pilot tone systems and the signalling modes with five-tone signals guarantee that communication is secure thus preventing interference from other radio communication.

The Ex-PMR 2000 is equipped with a variety of mechanisms to protect lone workers. The integrated position sensor enables the monitoring of angles and will in emergency situations trigger an automatic alarm (Lone worker). The functions for protecting lone workers as well as the emergency button also allow manual alarms to be triggered by workers in emergency situations.

All parameters for the Ex-PMR 2000 functions may be comfortably set on a PC using the corresponding software kit and can also be saved for programming several units. Thus minimizing work and ensuring that all radios harmonize with each other.

Intrinsically safe professional Mobile Radio FOR ZONE 1

Ex-PMR 2000



TECHNICAL DATA

Frequency range	VHF 136-174 MHz, UHF 400-470 MHz
Number of channels	16
Channel spacing	12,5/20/25 kHz
Operating voltage	7,4 V
Ambient temperature	-20 °C ... +50 °C
Antenna impedance	50 Ohm
Protection rating	IP64
Dimensions (LxWxD)	150 x 60 x 40 mm
Weight	ca. 400 g
Battery	2,000 mAh, Lithium-Ion
Operating time	ca. 12 h (90% Standby 5% TX 5% RX)

RANGE OF FUNCTIONS

- 16 channels
- Programmable channel spacing
- CTCSS, DCS, 5-tone signalling
- Scan mode
- Adjustable squelch levels
- Transmission time limitation (TOT)
- Emergency alarm functions
- Lone worker protection with position sensor
- Dead-man's switch



BATTERIES / CHARGER / LEATHERCASE / HAND STRAP				
Battery Ex-AM PMR 2000 (2000 mAh Li-Ion)	Charger Power adaptor and charger (UK oder EU)	Multi Docking Station MC PMR 2000	Leather case incl. carrying strap and belt loop (black)	Hand strap (black)
				
A0000282	AS000283	A0000285 EU A0000294 UK A0000295 US	A0000288	A0000298
HEADSETS				
Microphone-/Remote speaker combination Ex-HS02	Ear Protection Headset Ex-TRA 300	Ear Protection Headset Ex-TRA 300 Available with helmet adaptor for popular safety helmets		
				
A0000286	A0000389	A0000406		
Neck band Headset Ex-TRA 300	Fire brigade headset Ex-TRA 300 Adaptor for almost every helmet available	Fire Talk Supra Ex-TRA 300		
				
A0000393	A0000397	A0000401		
GENERAL ACCESSORIES				
VHF-Antenna (150-170 MHz) A0000278 (135-150 MHz, whip) A0000293	UHF-Antenna (420-450 MHz) A0000289 (450-470 MHz, long) A0000289	Cloning cable	Software Kit incl. data cable (attention serial plug needed)	
				
		A0000296	A0000297	

HEADSETS - SECURELY AND UNDERSTANDABLE

The effective use of resources is a fundamental key to the success of a company. Clear and targeted communication is a very important factor in this regard.

One such aspect is the use of modern facilities to relay information and instructions between the sender and the receiver in a reliable manner.

What is a problem, however, is the comprehensible transmission of the message. The correct volume is a factor. Another is the phonetically correct transmission of what is being said. It depends on whether the consonants can be transmitted and heard clearly and cleanly. Sounds such as “s, f, g, t, p, h, k and z” are particularly critical.

These occur in the upper frequency range and can be hard to understand, or not heard at all, especially amidst a cacophony of voices or background noise. “care” or “bear” becomes “air” or „shine” becomes „nine” or „sign”. This not only creates unpleasant situations; such misunderstandings in the operational environment can sometimes lead to hazardous situations. Without the correct equipment it is often virtually impossible to ensure a proper flow of information.



High-quality headset systems can help to avoid or defuse such situations. These transfer the sound to exactly where it is needed. Close to the ear. Moreover, these headsets are specialist devices in their field. They have been specifically developed and designed to ensure maximum quality reproduction, especially in noisy environments. Accurate voice transmission is just one reason why the use of headsets is worthwhile. Legislation does not prescribe the use of a hands free device or a headset when driving vehicles for nothing. Thanks to its technical components a headset fulfils the same tasks as a telephone receiver.

The advantage lies in the fact that both hands are kept free. The headset user has the use of both hands during a conversation and does not have to worry about his phone or radio, meaning he can concentrate on the conversation and his activity at hand.

Ex-TRA 80* Aurelis

in cooperation with
Intradex

The Ex-TRA 80* Aurelis series is the first audio accessory, especially designed for digital radios. Due to the integrated amplifier the Ex-TRA 80* Aurelis is one of the loudest speaker-mics on the digital market.

RANGE OF FUNCTIONS

- Loud and clear communication due to low noise amplifier
- Connector for external accessories
- Detachable clip
- Emergency button
- Three stage volume regulator



Ex-TRA 80* Aurelis








SPEAKER MICROPHONE FOR ZONE 1 / 21

COMPATIBLE WITH

AIRBUS THR9 Ex



HEADSETS

Ex-TRA PTT-E	Ex-TRA PTT-EH	Ex-TRA FT / FTS	Ex-TRA NB
			
A0000984	A0000985	A0000988-989	A0000986
Invisio M3 Ex	ComCom Ex	Serenity SPC Ex	
			
A0000976-977	A0000990	AS000990	

CERTIFICATION

ATEX



⊕ II 2G Ex ib IIC T4 Gb
⊕ II 2D Ex ib IIIC T130°C Db

IECEx



Ex ib IIC T4 Gb
Ex ib IIIC T130°C Db

TECHNICAL DATA

Loudspeaker

Pattern	dynamic
Impedance	8 Ohm at 1 mW/1 kHz
Sound pressure level	max. 86 dB
Frequency range	200 Hz - 8 kHz

Microphone

Charakteristik	electret
Directional	omni-directional
Impedance	1,200 Ohm
Sensitivity	-38 dB V/Pa 1 kHz
Frequency range	50 Hz - 16 kHz

Additional data

Ambient temperature	-20 °C to +55 °C
Protection class	IP54
Weight	approx. 200 g

Lite Com Pro II



The intrinsically safe Lite Com Pro II is a hearing protection with a built-in radio. The device is dedicated for use in extremely harsh and noisy environments and fulfills all requirements for absolutely safe communication. Simultaneously it protects you from harmful noise.

Despite the immense sound absorption you are always able to perceive your environment, e.g. warning signals, machine noise, other important information. This is possible due to two integrated exterior microphones. The speaker microphone is adjustable to your needs and has a noise reduction for clear communication. For hands-free communication you can use the VOX-Function and during enormous external noise pollution the PTT button enables reliable communication.











ZONE 0 / 20

All your settings can be done with three buttons and with the new Lite Com Pro II you can use a wider frequency range (403-470MHz) than before.











TECHNICAL DATA	
Frequency range	403-470 MHz
Channels	up to 30
Channel separation	12,5 kHz / 20 kHz / 25 kHz
Outreach	approx. 3km
Output power	200 / 20 / 10 mW
Ambient temperature	- 20 °C... + 50 °C
Operating time	ca. 14 hours (high output power)
Power supply	1,350 mAh Li-Ion Akku
Charging time	approx. 10-12 hours
Weight	approx. 540 g
Attenuation Headband/Neckband Helmet adapter	SNR 31 dB SNR 30 dB

- Two in one - Combination of radio & ear protection
- Easy to handle
- Reliable and professional communication system
- Brilliant and clear communication in noisy environment
- Perfect sound quality and wearing comfort
- Warning in case of low battery
- PTT button for easy and quick activation of voice transmission
- VOX functionality for unrestricted movement

DIFFERENT VERSIONS			SPARE BATTERY	CHARGING CABLE
Headband	Neckband	Helmet adapter	Battery Peltor ACK08	Charging cable DEAL-2AH for ACK08
				
AS000231	AS000232	AS000233	A0000568	A0000569
CHARGING PLUG		MICROPHONES		CERTIFICATION
Charging plug FR08 f. ACK08 (incl. internat. adapter kit)		Microphone electret MT53N-12	Microphone dynamic MT7N-02	
				
A0000570	A0000247	A0000252		
CERTIFICATION				
ATEX  II 1G Ex ia IIC T4 Ga II 1D Ex ia IIC T130°C Da I M1 Ex ia I Ma				
IECEx  Ex ia IIC T4 Ga Ex ia IIC T130°C Da Ex ia I Ma				

Intrinsically safe Headset Lite-Com Pro II

FOR ZONE 0 / 20

GENERAL ACCESSORIES			
Clean hygiene interface ear cup, one-way use HY100A	Hygiene kit HY79	Microphone protection HYM1000	Helmet adapter
			
A0000246	A0000417	A0000248	A0000432 - 436
External PTT button FL5602-501	Wind muffler f. dynamic microphone M40/1	Wind muffler f. exterior microphone M60/2	Wind muffler for microphone M995
			
A0000253	A0000990	A0000250	A0000428

ComComEx



in cooperation with
PHONAK

The intrinsically safe ComCom Ex is the ultimate headset, especially for connection to the Ex-Handy 07 and Ex-Handy 08. While wearing the headset you are still able to move freely and hands free working is possible.

With the noise cancelling microphone your counterpart is able to understand every command and you are able to understand all instructions as well due to the in-ear loudspeaker.





Intrinsically Safe Headset **ComCom Ex** FOR ZONE 1 / 21

COMPATIBLE EQUIPMENT	GENERAL			
Ex-Handy 08, LWP / 07 / Ex-GSM 07	SNR: 28 dB Acoustic filter 110WH	SNR: 25 dB Acoustic filter 100YE	SNR: 24 dB Acoustic filter 1050R	Lace
				
Page 4	A0000962	A0000963	A0000964	A0000965
Ex-HSPA 08 / LWP	Generic ear shells	Wind muffler		
				
Page 6	A0000966	A0000967		

TECHNICAL DATA	
Loudspeaker	
Pattern	Balanced Armature
Impedance	50 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 100 dB
Frequency range	100 Hz - 10 kHz
Microphone	
Pattern	electret
Directional	noise cancelling (NC)
Impedance	2,200 Ω
Sensitivity	-44 dB V/Pa, 1 kHz
Frequency range	100 Hz - 10 kHz
Additional data	
Ambient temperature	-20 °C to +55 °C
Weight	approx. 18 g

- Excellent performance
- Noise cancelling microphone
- Totally free movement
- Highest wearing comfort with custom-made ear shells

CERTIFICATION	
ATEX 	⊕ II 2G Ex ib IIC T4 Gb ⊕ II 2D Ex ib IIIC T130°C Db
IECEX 	Ex ib IIC T4 Gb Ex ib IIIC T130°C Db

Serenity SPC Ex



in cooperation with
PHONAK

The intrinsically safe Serenity SPC Ex is a hearing protection headset especially for connection to the Ex-Handy 07 and Ex-Handy 08. The light weight headset enables you to move freely and with both hands free during your telephone call. In noisy environments you are always protected against loud ambient noises due to the high noise attenuation of the Serenity SPC Ex. As well as you understand your counterpart, your counterpart can also hear you excellently because of the noise cancelling of the microphone.



Hearing Protection Headset Serenity SPC Ex

FOR ZONE 1 / 21

COMPATIBLE EQUIPMENT		GENERAL			
Ex-Handy 08, LWP / 07 / Ex-GSM 07		SNR: 28 dB Acoustic filter 110WH	SNR: 25 dB Acoustic filter 100YE	SNR: 24 dB Acoustic filter 105OR	Lace
					
Page 4		A0000962	A0000963	A0000964	A0000965
Ex-HSPA 08 / LWP		Wind muffler			
					
Page 6		A0000967			

TECHNICAL DATA	
Loudspeaker	
Pattern	Balanced Armature
Impedance	50 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 100 dB
Frequency range	100 Hz - 10 kHz
Microphone	
Pattern	electret
Directional	noise cancelling (NC)
Impedance	2,200 Ω
Sensitivity	-44 dB V/Pa, 1 kHz
Frequency range	100 Hz - 10 kHz
Additional data	
Ambient temperature	-20 °C to +55 °C
Noise attenuation	max. 28 dB
Weight	approx. 23 g

- Excellent performance
- Noise cancelling microphone
- Totally free movement
- Highest wearing comfort and hearing protection due to custom made ear shells
- Complies to EN 352-2

CERTIFICATION

ATEX



⊕ II 2G Ex ib IIC T4 Gb
⊕ II 2D Ex ib IIIC T130°C Db

IECEx



Ex ib IIC T4 Gb
Ex ib IIIC T130°C Db

Ex-RSM Aurelis BT



The world's first intrinsically safe Remote Speaker Microphone Ex-RSM Aurelis BT is the latest wireless solution for you. It can connect with any Bluetooth mobile phone or PDA.. Even in harsh and loud environment your colleagues are able to understand you due to the high volume of the device. In the event that the environment is too loud, you can connect the device to a hearing protection headset without any limitations.

CERTIFICATION	
ATEX	⊕ II 2G Ex ib IIC T4 Gb ⊕ II 2D Ex ib IIIB T135°C Db
IECEX	Ex ib IIC T4 Gb Ex ib IIIB T135°C Db
NEC	North America (USA / Canada) Class I, Division 1, Groups A-D T4 Class II, Division 1, Groups F-G T4 Class III, Division 1



TECHNICAL DATA	
Loudspeaker	
Sound pressure level	90 dB at 0,3 m
Frequency range	200 Hz - 8 kHz
Microphone	
Pattern	electret
Directional	omni-directional
Frequency range	50 Hz - 16 kHz
Additional data	
Ambient temperature	-20 °C to +55 °C
Bluetooth	2.0
Bluetooth profiles	HSP, HFP, SPP
Power supply	Li-Ion 800mAh
Protection class	IP54
Talk-time	up to 8,5 h
Stand-by time	up to 60 h (BT connected)

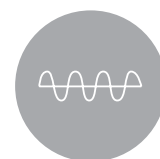
Intrinsically safe Ex-RSM Aurelis BT

SPEAKERMIC FOR ZONE 1 / 21

COMPATIBLE PRODUCTS		ACCESSORIES			
Ex-Handy 07/08	Tab-Ex®	Ex-TRA PTT-E	Ex-TRA PTT-EH	Ex-TRA FT / FTS	Ex-TRA NB
		A0000984	A0000985	A0000988-989	A0000986
AIRBUS TPH 700 Ex	Getac V100 -Ex2	Ex-TRA INVISIO		Ex-TRA ComCom Ex	Serenity SPC Ex
		A0000976-977		A0000990	AS000990

RANGE OF FUNCTIONS

- To be used with any Bluetooth® enabled device (Mobile Phone, Radio, PDA, Tablet)
- When connected to a radio, the speakermic can be attached to clothing for more comfortable, hands-free communication.
- Background noise reduction technology, allowing for more effective communication..
- Bluetooth®, allowing hands-free communication.
- Loud and clear communication with three stage volume regulator
- Low weight (approx. 180 g)



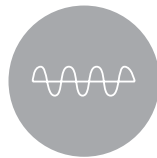
Ex-TRA 300 ANALOG

HEADSETS FOR ZONE 1



Ex-TRA300

Analog



in cooperation with
Intradex

TECHNICAL DATA

Loudspeaker

Pattern	dynamic
Impedance	150 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 115 dB
Frequency range	150 Hz - 12 kHz

Microphone

Pattern	electret
Directional	noise cancelling (NC)
Impedance	4.400 Ohm
Sensitivity	-44 dB V/Pa 1 kHz
Frequency range	300 Hz - 9 kHz

Additional data

Ambient temperature	-20°C to +50°C
Protection class	IP54
Weight	approx. 520 g
Noise attenuation	approx. 27 dB

CERTIFICATION

ATEX Ⓜ II 2G Ex ia IIC T4







IECEX Ex ia IIC T4 Gb



- Clear sound in noisy environments
- High attenuation
- High and excellent wearing comfort
- Big PTT-button





The Ex-TRA 300 headsets are a series of explosion-protected headsets for use under extreme conditions. The products have been developed in conjunction with demanding users and subjected to rigorous examination. Therefore the headset will fulfill all requirements for industrial capability and reliability.

COMPATIBLE PRODUCTS

Ex-PMR 1000	Ex-PMR 2000	Motorola GP 900	Motorola GP340-680 Ex
			
AS000260	AS000280/ 281		

Intrinsically safe HEARING PROTECTION HEADSET FOR ZONE 1

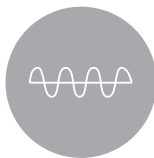
ACCESSORIES

Windscreen for microphone M995	Foam speaker cover
	
A0000428	A0000430
Headband cushion (nappa leather)	Ear cushions
	
A0000431	A0000429



Ex-TRA300

Analog



in cooperation with
Intradex

TECHNICAL DATA	
Loudspeaker	
Pattern	dynamic
Impedance	150 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 115 dB
Frequency range	150 Hz - 12 kHz
Microphone	
Pattern	electret
Directional	noise cancelling (NC)
Impedance	4.400 Ohm
Sensitivity	-44 dB V/Pa 1 kHz
Frequency range	300 Hz - 9 kHz
Additional data	
Ambient temperature	-20°C to +50°C
Protection class	IP54
Weight	approx. 520 g
Noise attenuation	approx. 27 dB

CERTIFICATION	
ATEX	Ⓜ II 2G Ex ia IIC T4
IECEx	Ex ia IIC T4 Gb



The Ex-TRA 300 headsets are a series of explosion-protected headsets for use under extreme conditions. The products have been developed in conjunction with demanding users and subjected to rigorous examination. Therefore the headset will fulfill all requirements for industrial capability and reliability.

COMPATIBLE PRODUCTS			
Ex-PMR 1000	Ex-PMR 2000	Motorola GP 900	Motorola GP340-680 Ex
AS000260	AS000280/ 281		

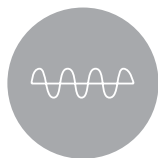
HEADSET WITH HELMET ADAPTER FOR ZONE 1

ACCESSORIES		
Windscreen for microphone M995	Helmet adaptor, types on request	
A0000428	A0000432 - 436	
Headband cushion (nappa leather)	Ear cushions	Foam speaker cover
A0000431	A0000429	A0000430

- Clear sound in noisy environments
- High attenuation
- High and excellent wearing comfort
- Big PTT-button
- Fits to nearly all helmet variants

Ex-TRA300

Analog



in cooperation with
Imtradex

TECHNICAL DATA	
Loudspeaker	
Pattern	magnetic
Impedance	250 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 115 dB
Frequency range	100 Hz - 4 kHz
Microphone	
Pattern	electret
Directional	noise cancelling (NC)
Impedance	4.400 Ohm
Sensitivity	-44 dB V/Pa 1 kHz
Frequency range	300 Hz - 10 kHz
Additional data	
Ambient temperature	-20°C to +50°C
Protection class	IP54
Weight	approx. 118 g

CERTIFICATION	
ATEX	II 2G Ex ia IIC T4
IECEx	Ex ia IIC T4 Gb



The Ex-TRA 300 Neckband provides to you a comfortable light weight headset solution and can be used with almost every kind of helmet. Through the Open-Ear-Gain technology you are able to hear all ambient noises and also be able to have clear and loud communication even in dangerous situations.

COMPATIBLE PRODUCTS			
Ex-PMR 1000	Ex-PMR 2000	Motorola GP 900	Motorola GP340-680 Ex
AS000260	AS000280/ 281		

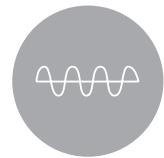
INTRINSICALLY SAFE HEARING PROTECTION HEADSET WITH **HELMET MOUNT** FOR ZONE 1

- Light weight headset
- Pressure-free comfortable wearing
- Possible with helmets and chemical splash suits

ACCESSORIES		
Windscreen for microphone M995	Ear Mould	
A0000428	A0000424 - 425	
Ear bud	Acoustic ear olive	Acoustic ear tube
A0000421 - 423	A0000426	A0000427

Ex-TRA300

Analog







in cooperation with
Intradex

TECHNICAL DATA	
Loudspeaker	
Pattern	magnetic
Impedance	150 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 106 dB
Frequency range	300 Hz - 4 kHz
Microphone	
Pattern	electret
Directional	noise cancelling (NC)
Impedance	2.500 Ohm
Sensitivity	-34 dB V/Pa 1 kHz
Frequency range	100 Hz - 5 kHz
Additional data	
Ambient temperature	-20°C to +50°C
Protection class	IP54
Weight	approx. 130 g



The Ex-TRA 300 Fire talk headset is designed to provide optimum communication in critical situations for fire and rescue services. The robust and rugged design and the PTT button provides to you with the highest performance in all situations. Through a large variety of helmet adaptors you can use it with almost all fire brigade standard helmets. Even changing from one helmet to another is quickly possible.

COMPATIBLE PRODUCTS

Ex-PMR 1000	Ex-PMR 2000	Motorola GP 900	Motorola GP340-680 Ex
			
AS000260	AS000280/ 281		

Intrinsically safe **FIRE TALK HEADSET** FOR ZONE 1

CERTIFICATION

ATEX II 2G Ex ia IIC T4



IECEx Ex ia IIC T4 Gb



- Clear voice transmission and clear understanding
- Easy adaptation to helmets
- Rugged and big PTT button

ACCESSORIES

Windscreen for microphone M995



A0000428

Helmet adaptor for Fire brigade Headset



A0000451-461



Ex-TRA300



Analog



in cooperation with
Intradex



The Ex-TRA 300 Fire talk supra is a special designed and very robust headset. It fits on all common fire brigade supra helmets without any additional adaption. Due to the design of the headset the rescue brigades can hear the ambient noises and have clear and loud communication to avoid mishearing commands.

TECHNICAL DATA	
Loudspeaker	
Pattern	magnetic
Impedance	150 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 106 dB
Frequency range	300 Hz - 4 kHz
Microphone	
Pattern	electret
Directional	noise cancelling (NC)
Impedance	2.500 Ohm
Sensitivity	-34 dB V/Pa 1 kHz
Frequency range	100 Hz - 5 kHz
Additional data	
Ambient temperature	-20°C to +50°C
Protection class	IP54
Weight	approx. 130 g

CERTIFICATION	
ATEX 	II 2G Ex ia IIC T4
IECEx 	Ex ia IIC T4 Gb

- Perfect voice transmission even with loud ambient noises
- Special design for fire brigade helmets
- Optimum performance due to design
- Robust and big PTT button

Intrinsically safe FIRE TALK SUPRA HEADSET FOR ZONE 1

ACCESSORIES

Windscreen for Microphone M995

A0000428



COMPATIBLE PRODUCTS			
Ex-PMR 1000	Ex-PMR 2000	Motorola GP 900	Motorola GP340-680 Ex
AS000260	AS000280/ 281		

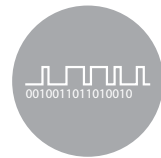
Ex-TRA 300 DIGITAL

HEADSETS FOR ZONE 1



Ex-TRA300

Digital



in cooperation with
Intralex

TECHNICAL DATA

Loudspeaker

Pattern	dynamic
Impedance	150 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 115 dB
Frequency range	150 Hz - 12 kHz

Microphone

Pattern	electret
Directional	noise cancelling (NC)
Impedance	4.400 Ohm
Sensitivity	-44 dB V/Pa 1 kHz
Frequency range	300 Hz - 9 kHz

Additional data

Ambient temperature	-20°C to +50°C
Protection class	IP54
Weight	approx. 520 g
Noise attenuation	approx. 27 dB

CERTIFICATION

ATEX Ⓜ II 2G Ex ia IIC T4



IECEx Ex ia IIC T4 Gb



- Internal amplifier for best volume and clear sound in every situation
- High attenuation
- High and excellent wearing comfort
- Big PTT-button

The Ex-TRA 300 headsets are a series of explosion-protected headsets for use under extreme conditions. The products have been developed in conjunction with demanding users and subjected to rigorous examination. Therefore the headset will fulfill all requirements for industrial capability and reliability.

COMPATIBLE PRODUCTS

AIRBUS THR880i Ex



AIRBUS THR9 Ex



Intrinsically safe HEARING PROTECTION HEADSET FOR ZONE 1

ACCESSORIES

Windscreen for microphone M995



A0000428

Foam speaker cover



A0000430

Headband cushion (nappa leather)



A0000431

Ear cushions

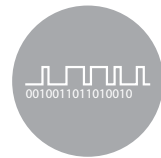


A0000429



Ex-TRA300

Digital



in cooperation with
Intradex

TECHNICAL DATA

Loudspeaker

Pattern	dynamic
Impedance	150 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 115 dB
Frequency range	150 Hz - 12 kHz

Microphone

Pattern	electret
Directional	noise cancelling (NC)
Impedance	4.400 Ohm
Sensitivity	-44 dB V/Pa 1 kHz
Frequency range	300 Hz - 9 kHz

Additional data

Ambient temperature	-20°C to +50°C
Protection class	IP54
Weight	approx. 520 g
Noise attenuation	approx. 27 dB

CERTIFICATION

ATEX Ⓜ II 2G Ex ia IIC T4



IECEx Ex ia IIC T4 Gb



- Internal amplifier for best volume and clear sound in every situation
- High attenuation
- High and excellent wearing comfort
- Big PTT-button
- Fits to nearly all helmet variants

The Ex-TRA 300 headsets are a series of explosion-protected headsets for use under extreme conditions. The products have been developed in conjunction with demanding users and subjected to rigorous examination. Therefore the headset will fulfill all requirements for industrial capability and reliability.

COMPATIBLE PRODUCTS

AIRBUS THR880i Ex



AIRBUS THR9 Ex



HEADSET WITH HELMET ADAPTER FOR ZONE 1

ACCESSORIES

Windscreen for microphone M995



A0000428

Helmet adaptor, types on request



A0000432 - 436

Headband cushion (nappa leather)



A0000431

Ear cushions



A0000429

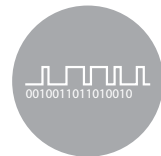
Foam speaker cover



A0000430

Ex-TRA300

Digital



in cooperation with
Intracore

TECHNICAL DATA	
Loudspeaker	
Pattern	magnetic
Impedance	250 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 115 dB
Frequency range	100 Hz - 4 kHz
Microphone	
Pattern	electret
Directional	noise cancelling (NC)
Impedance	4.400 Ohm
Sensitivity	-44 dB V/Pa 1 kHz
Frequency range	300 Hz - 10 kHz
Additional data	
Ambient temperature	-20°C to +50°C
Protection class	IP54
Weight	approx. 118 g

CERTIFICATION	
ATEX	II 2G Ex ia IIC T4
IECEx	Ex ia IIC T4 Gb



The Ex-TRA 300 Neckband provides to you a comfortable light weight headset solution and can be used with almost every kind of helmet. Through the Open-Ear-Gain technology you are able to hear all ambient noises and also be able to have clear and loud communication even in dangerous situations.

COMPATIBLE PRODUCTS	
AIRBUS THR880i Ex	AIRBUS THR9 Ex

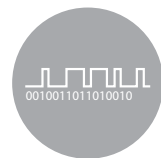
Intrinsically safe **NECKBAND HEADSET** FOR ZONE 1

- Internal amplifier for best volume and clear sound in every situation
- Light weight headset
- Pressure-free comfortable wearing
- Possible with helmets and chemical splash suit

ACCESSORIES		
Windscreen for microphone M995	Ear Mould	
A0000428	A0000424 - 425	
Ear bud	Acoustic ear olive	Acoustic ear tube
A0000421 - 423	A0000426	A0000427

Ex-TRA300

Digital



in cooperation with
Intradex

TECHNICAL DATA	
Loudspeaker	
Pattern	magnetic
Impedance	150 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 106 dB
Frequency range	300 Hz - 4 kHz
Microphone	
Pattern	electret
Directional	noise cancelling (NC)
Impedance	2.500 Ohm
Sensitivity	-34 dB V/Pa 1 kHz
Frequency range	100 Hz - 5 kHz
Additional data	
Ambient temperature	-20°C to +50°C
Protection class	IP54
Weight	approx. 130 g

CERTIFICATION	
ATEX	II 2G Ex ia IIC T4
IECEx	Ex ia IIC T4 Gb



- Internal amplifier for best volume and clear sound in every situation
- Clear voice transmission and clear understanding
- Easy adaptation to helmets
- Rugged and big PTT button

The Ex-TRA 300 Fire talk headset is designed to provide optimum communication in critical situations for fire and rescue services. The robust and rugged design and the PTT button provides to you with the highest performance in all situations. Through a large variety of helmet adaptors you can use it with almost all fire brigade standard helmets. Even changing from one helmet to other is quickly possible.

COMPATIBLE PRODUCTS

AIRBUS THR880i Ex



AIRBUS THR9 Ex



Intrinsically safe **FIRE TALK HEADSET** FOR ZONE 1

ACCESSORIES

Windscreen for microphone M995



A0000428

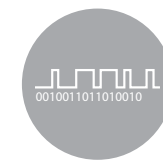
Helmet adaptor for Fire brigade Headset



A0000451-461



Ex-TRA300



in cooperation with
Intralex



Digital

ecom
MOBILE SAFETY



The Ex-TRA 300 Fire talk supra is a special designed and very robust headset. It fits on all common fire brigade supra helmets without any additional adaption. Due to the design of the headset the rescue brigades can hear the ambient noises and have clear and loud communication to avoid mishearing commands.

TECHNICAL DATA	
Loudspeaker	
Pattern	magnetic
Impedance	150 Ohm at 1 mW / 1 kHz
Sound pressure level	max. 106 dB
Frequency range	300 Hz - 4 kHz
Microphone	
Pattern	electret
Directional	noise cancelling (NC)
Impedance	2.500 Ohm
Sensitivity	-34 dB V/Pa 1 kHz
Frequency range	100 Hz - 5 kHz
Additional data	
Ambient temperature	-20°C to +50°C
Protection class	IP54
Weight	approx. 130 g

CERTIFICATION	
ATEX 	II 2G Ex ia IIC T4
IECEx 	Ex ia IIC T4 Gb

- Internal amplifier for best volume and clear sound in every situation
- Perfect voice transmission even with loud ambient noises
- Special design for fire brigade helmets
- Optimum performance due to design
- Robust and big PTT button

Intrinsically safe **FIRE TALK SUPRA HEADSET** FOR ZONE 1

ACCESSORIES

Windscreen for Microphone M995



A0000428



COMPATIBLE PRODUCTS	
AIRBUS THR880i Ex	AIRBUS THR9 Ex
	



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