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### **Note:**

The current safety instructions, operating instructions, EC Declaration of Conformity and the Certificate of Conformity can be downloaded from the relevant product page at [www.ecom-ex.com](http://www.ecom-ex.com), or alternatively they can be requested directly from the manufacturer.

## **1. Application**

### **1.1 ATEX & IECEx**

The Ex-Handy 08 is an intrinsically safe water-, dust- and impact resistant mobile phone for industrial application in areas with an increased risk of explosion in zone 1, zone 2, zone 21 and zone 22 in accordance with directives 1999/92/EC, 94/9/EC and the IECEx System.

### **1.2 NEC & CEC**

The Ex-Handy 08 is an intrinsically safe water-, dust- and impact resistant mobile phone for industrial application in areas with an increased risk of explosion. Approved for Division 1 and 2 Class I, II, III.

## **2. Safety precautions**

These safety instructions contain information and safety regulations which are to be observed without fail for safe operation in the described conditions. Non-observance of this information and these instructions can have serious consequences or it may violate regulations.

Please read these safety instructions carefully before starting to use the device! In the event of conflicting information the details specified in the safety precautions shall apply.

In case of any doubt (in the form of translation or printing errors) the English version shall apply.

## **3. Faults and damage**

If there is any reason to suspect that the safety of the device has been impaired, it must be withdrawn from use and removed immediately from the hazardous area. Measures must be taken to prevent it from being restarted accidentally.

The safety of the device may be compromised, if, for example:

- There is visible damage to the housing.
- The device has been subjected to excessive loads.
- The device has been improperly stored.
- The device has been damaged in transit.
- Device markings or inscriptions are illegible.
- Malfunctions occur.
- Permitted limit values have been exceeded.

#### **4. Safety regulations**

Use of the Ex-Handy 08 intrinsically safe mobile phone assumes that the operator observes the conventional safety regulations and has read the certificate of conformity in order to eliminate faulty operation of the device.



The following points are to be observed:

- The device has to be protected against strong impacts.
- The device must be protected against permanent UV-radiation.
- The unit must not be used in close proximity to processes generating high charges.
- Friction of the housing should be avoided as far as possible for electrostatic reasons.
- Do not disassemble the device.
- Use only the original battery module "Ex-BPH 08 \*\*", where "\*\*\*" is replaced by letters for the differentiation of permissible versions of the battery module.
- Do not dismount the battery pack inside hazardous areas.
- It is not allowed to carry dismounted battery packs into the hazardous areas.
- The battery module may only be charged outside the hazardous areas and only by using the Safety box 'SBH 07' in combination with a power supply or alternatively the desktop charger 'DCH' can be used without the 'SBH 07'.
- The battery module may only be charged in a temperature range of 0 – 45 °C.
- The data connection is only allowed outside the hazardous areas and only allowed by using the Safety box 'SBH 07' or the desktop charger 'DCH' for a safe USB connection.
- For charging or data transfer first connect the Safety box "SBH 07" to the phone, then connect the Safety box "SBH 07" to an USB-A socket.  
If done differently, the Safety box "SBH 07" may get harmed.
- When changing the battery (outside hazardous areas), ensure that both the device and the battery module are clean of dust and dirt.
- Only accessories approved by ecom instruments GmbH may be used. See relevant product page at [www.ecom-ex.com](http://www.ecom-ex.com).
- Wired headsets may only be used inside hazardous areas if the headset itself is certified for use inside hazardous areas. The lower level of certification would apply to the combination of phone and headset.
- It must be ensured that the device is not taken into zones 0 or 20.

## 5. Ex-Data

### 5.1 ATEX

ATEX Certificate of Conformity no.: EPS 11 ATEX 1 345 X

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

Ambient temperature: Ta -20 °C ... +55 °C

Approved for zone 1 and 2, device group II, explosion group IIC (explosive gases, vapors or mist), temperature class T4. Approved for zone 21 and 22, device group III, explosion group IIIC (combustible flying, non-conductive dust and conductive dust), maximum Temperature 130°C.

### 5.2 IECEx

IECEx Certificate of Conformity no.: IECEx EPS 11.0005X

Ex-Marking: Ex ib IIC T4 Gb IP64  
Ex ib IIIC T130°C Db IP6X

Ambient temperature: Ta -20 °C ... +55 °C

Approved for zone 1 and 2, device group II, explosion group IIC (explosive gases, vapors or mist), temperature class T4. Approved for zone 21 and 22, device group III, explosion group IIIC (combustible flying, non-conductive dust and conductive dust), maximum Temperature 130°C.

### 5.3 NEC & CEC

Ex-Marking: IS Class I, Division 1, Groups A-D T4  
IS Class II, Division 1, Groups E-G T4  
IS Class III, Division 1



C US

Ambient temperature : Ta -20 °C ... +55 °C

Approved for Division 1 and 2 Class I, II, III.



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## 6. Specifications

|                                |  |
|--------------------------------|--|
| Networks:                      | EDGE 850/900/1800/1900 MHz<br>HSPA 900/1700/2100 MHz<br>HSPA 850/1900/2100 MHz |
| Bluetooth:                     | 3.0 (DUN, OPP, SAP, HSP, HFP, FTP, A2DP, AVRCP, PBAP)                          |
| Display:                       | 5 cm (2 inch), 240 x 320 pixels  |
| Power supply:                  | Ex-BPH 08 **, Li-Ion 3,7 V   |
| Dimensions (without battery):  | 126 x 60 x 25 mm   |
| Weight (including battery SC): | approx. 200 g  |
| CE-designation:                | <b>CE 0102</b>   |
| Protection class:              | IP68 (for 30 minutes, 2 meters under water)                                    |
| SAR:                           | max. 0.908 W/kg (10g)  |

## 7. Changing the battery

Changing the battery is allowed only outside hazardous areas!

Please also observe 4 Safety regulations.

1. If the battery is mounted, switch off the phone and turn the battery module's screws counter-clockwise with a suitable screwdriver.
2. Lift the battery module at the top side between the screws.
3. Insert your SIM and – if needed – a MicroSD card (max. 16 GB).
4. Insert the battery module by first placing the noses on the bottom side of the battery module into the respective holes in the phone's housing at its bottom. Press the battery module down at the top side and tighten the screws of the battery compartment clockwise with a suitable screwdriver. Do not overtighten the screw! They need to be fastened hand-tight!
5. Charge the mobile phone: The battery supplied with the phone is not fully charged. It is recommended to charge the phone for five hours before using it for the first time. The full capacity of the battery is reached after 3-4 complete charge/discharge cycles.



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**Note:**

- There is a risk of explosion if the battery is exposed to a flame.
- Do not short-circuit the battery.
- The battery does not contain any parts that can be exchanged.
- The casing of the battery should not be opened under any circumstances.
- Only use ecom charging accessories (see point 4).
- The use of other chargers or batteries is not permitted.  
Ex-protection cannot be guaranteed in this case.
- Used batteries are to be disposed of properly.
- If the phone is not going to be used for a prolonged period, the battery should be removed.
- The battery module should only be stored within a range of -20 °C to +35°C (for up to 6 months) or within a range of -20 °C to +45 °C (for up to 1 month).
- The charge level of the battery module has to be checked after 6 months at the latest in order to prevent deep discharge.
- The phone should not be connected to the charger if the battery is not inserted.
- If the battery is completely discharged, the phone will not switch on and the display will not show a charging process. Connect the phone to the charger. After charging for a few minutes the display will appear again and you can then switch on the phone.
- Battery usage by children should be supervised.

**8. Safety precautions for the battery**

Damaged batteries and chargers should be removed from use and sent to ecom instruments GmbH for inspection.

**Note:**

- Extreme temperatures can have an adverse effect on charging the battery module.
- Do not dispose of the battery module in a fire.
- Do not short-circuit the battery module.
- Dispose of the battery module in accordance with local regulations.
- Do not dispose of the battery module with normal household waste.

High quality lithium-ion batteries are used in your Ex-Handy 08. These batteries have numerous advantages in everyday use, such as a low weight and high capacity in a nevertheless compact construction. In addition these

batteries also exhibit practically no memory effect. However, these batteries are susceptible to a natural aging process which impairs their functionality. Modern batteries today have a lifespan of around 500 charge cycles, which, when used daily, corresponds to a service life of approximately 2 years. The ageing process increases rapidly after this period, which means that the batteries are deemed technically defective after 500 charge cycles. Moreover, the battery cells could expand and cause irreparable damage to your device in a worst case scenario.

For this reason rechargeable batteries with lithium cells should be replaced after 2 years at the latest or after reaching a battery capacity that is 50% of its initial value.

#### **Note:**

The battery used in this unit poses a fire hazard and can cause chemical injuries if it is used improperly. Neither the battery nor the battery cells should be opened or disassembled and they should not be burned or exposed to temperatures exceeding 100 °C.

### **9. Repair**

Repairs are to be conducted by ecom instruments GmbH or by personnel or service centers authorized by ecom instruments GmbH, because the safety of the device needs to be tested after repairs are implemented.

The actual repair report sheet can be downloaded from the service area at [www.ecom-ex.com](http://www.ecom-ex.com).

### **10. Cleaning, maintenance and storage**

- Only use a suitable cloth or sponge to clean the phone.  
Do not use any solvents or abrasive cleaning agents when cleaning.
- It is recommended that you have the functionality and accuracy of the phone inspected by the manufacturer every two years.
- If the unit is going to be stored for a prolonged period, remove the battery module from the unit and check its charge condition at regular intervals.
- Do not exceed the permissible storage temperature range of -20 °C ... +55 °C!
- The battery module should only be stored within a range of -20 °C to +35 °C (for up to 6 months) or within a range of -20 °C to +45 °C (for up to 1 month).



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## 11. Disposal

Old electrical devices by ecom instruments GmbH will be directed to disposal at our expense and disposed of free of charge in accordance with European Directive 2002/96/EC and the Elektro- und Elektronikgerätegesetz (ElektroGesetz – German Electrical and Electronic Equipment Act) dated 16 March 2005. The costs associated with returning devices to ecom instruments GmbH are to be borne by the sender.

In accordance with Article 1, Section 18 and Article 2 of the Act revising the law of Waste-Related Product Responsibility for Batteries and Accumulators (Gesetz zur Neuregelung der abfallrechtlichen Produktverantwortung für Batterien und Akkumulatoren) dated 25 June 2009, we are obligated to provide the following information.


Your device contains a rechargeable lithium battery.

Depleted batteries or rechargeable batteries that can no longer be recharged should never be disposed of along with normal or household waste.

Old batteries can contain harmful substances that are hazardous to health and damaging to the environment. Please return the batteries/rechargeable batteries. Return is free of charge and required by law. Please only dispose of discharged batteries in the designated containers and tape the terminals of lithium batteries.

**Note:** The battery used in this unit poses a fire hazard and can cause chemical injuries if it is used improperly. Neither the battery nor the battery cells should be opened or disassembled and they should not be burned or exposed to temperatures exceeding 100 °C. If the battery needs to be disposed of, it can be removed as described under point (7). The disposal regulations specified above are also applicable for old devices. All batteries and rechargeable batteries can be recycled. Precious raw materials such as iron, zinc and nickel can therefore be reused.



The symbol  has the following meaning: Old electrical devices should not be disposed of along with normal or household waste.



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## **12. Warranty and liability**

In accordance with our general terms and conditions ecom instruments GmbH provides a warranty for this product for a period of 3 years regarding its function and material under the specified and permitted operating and maintenance conditions. This excludes all parts that are subject to wear and tear (e.g. batteries). We provide a 6-month manufacturer's warranty especially for the supplied Ex-battery.

This warranty does not extend to products that are used improperly, have been modified, neglected, damaged in accidents or exposed to abnormal operating conditions and inappropriate handling.

Any claims under the warranty can be invoked by returning the defective equipment to the manufacturer. We reserve the right to repair, adjust or exchange the device.

The aforementioned warranty conditions are the sole and only right of the purchaser to compensation, are exclusively valid and replace all other contract or legal warranty obligations. ecom instruments GmbH assumes no liability for special, direct, indirect, accompanying or consequential damage as well as losses including the loss of data, independent of whether it was caused by violation of the warranty obligation, lawful or unlawful action, action in good faith or any other action.

If the limitation of a legal warranty as well as the exclusion or limitation of accompanying or consequential damage is not permissible in certain countries, it may be that the aforementioned limitations and exclusions are not valid for every purchaser. Should any such clause of these warranty conditions be declared ineffective or unenforceable by a competent court, then the effectiveness or enforceability of any of the other conditions of these warranty conditions shall remain unaffected by such a judgment.

## **13. EC Declaration of Conformity and Certificate**

The EC declaration and the certificate of conformity is enclosed with the sales packaging as a separate document.

Please also observe the information provided underneath the table of contents.



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