

# ZEB



ZEB Surface Blaster with ID-Chip

## OPTIONS & EXTENSIONS

- Heavy duty design
- Unique safety key (customer specific colors)
- IP67 Waterproof plugs & Flex-Electrode
- Internal battery & world charger
- BAM (Germany) Homologation
- Region 1 & Region 2 radio modules
- Antenna exchangeable

## OVERVIEW

The Surface Blaster is the newest non-electric shock tube initiation system offered by ZEB.

The **ZEB Blaster OP** was developed to be used world-wide for quarry, civil construction and open pit mining blasting operations. The equipment is homologated by BAM (Germany) and fulfills all of today's safety requirements under sign BAM-ZM-711.

## ADVANTAGES

The heavy-duty housings of the blaster are colored signal orange with reflective stripes, to allow a better visibility while working outdoors.

Waterproof coded Push-Pull-Connectors for the intelligent battery charger and the ignition electrode allow a fast setup of the equipment.

An impact protection secures the antenna socket against breaking due to bad work conditions.

The blaster includes everything needed to start a blasting operation. Every blaster comes with ignition electrode, battery charger, antenna and unique ID-Chip.

## FLEXIBILITY

The blaster can be used in 3 operational modes: local initiation, radio slave, radio master.

The unique safety key secures the equipment from unauthorized usage. It also automatically switches the radio modes between master and slave.

According to customer requirements each blaster can be equipped with world region 1 (Europe, Africa) CE or region 2 (North- & South America) FCC radio modules with up to 2km range.

## TECHNICAL SPECIFICATIONS

Initiation  
Voltage

-1700V

Charge  
Time

2s

Battery  
Type

Lead, rechargeable

Protection  
Type

IP67

Temperature  
Range

-20°C to +50°C

## RADIO SPECIFICATIONS

Output  
Power

500mW

Frequency  
Band

868MHz / 915 MHz

Range

~ 2 (5) km

Antenna  
Wavelength

$\lambda/2$

Antenna  
Type

Dipol

## Dimensions

L x W x H

220 x 180 x 70mm

Weight

4100g



## Safety

Key

12bit



The flex-electrode prevents the equipment from impact damage. It can be removed for transportation and is stored inside the housing. This also protects the ignition electrode at the end of the flexible cable against dirt and environmental impacts.

A unidirectional magnetic waterproof antenna is also offered. If the operator needs to position inside a bunker or the blaster is hidden under a rock the unidirectional antenna with its 3m cable can be used for best results.



The benefits of using the wireless remote controlled mode are to prevent the usage of one electric starting detonator, to save up to 300m of shock tube as safety distance, eliminates the removal of electric wires after the blast and raises the safety level for the operator and staff (Safety Key).

### SAFETY WARNING

Read the User Manual delivered with the blasting machine carefully before using the product. This product is not allowed to be used in flammable environments such as methane or coal dust.

### DISCLAIMER AND LIMITATION OF LIABILITY

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