



# Battery Powered Portable Igniter

**HEP**  
with electrodes  
**HEP-IR 0.5**  
**HEP-IR 1.0**  
**HEP-IR 1.5**

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## SAFETY INFORMATION

The HEP is potentially a very hazardous unit and if misused can cause serious injury. Care should be exercised at all times to prevent accidents.

Never point or hold the igniter probe tip, near to people or animals, as the voltage and current output can cause serious burns, and due to the high energy probe to be fatal.

Contact Fireeye before opening the control box as there is stored energy which could prove fatal if touched.

Read these instructions carefully before use and contact Fireeye if there are any areas of misunderstanding as this device generates a dangerous voltage of 2kV. Ignoring this information can produce injury to individuals, and possible damage to equipment.

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## DESCRIPTION

The HEP portable High Energy Igniter includes an electronic 2kV ignition module powered from an internal battery pack and an integrated mains power charger. The unit is designed for safe hand operation for ignition of gas burners in a range of applications which include refineries and furnaces. It may also be used to light small No. 2 oil burners.

The portable device is equipped with a pushbutton to start the sparking system. To prevent accidental ignition, it is necessary to first turn the unit on, then to operate a separate pushbutton. The unit will spark until the button is released.

The ignition electrode is available in various lengths, 0.5 (HEP-IR 0.5), 1.0 (HEP-IR 1.0), 1.5 (HEP-IR 1.5) meters.

The unit is supplied with a nominal charge level, and should be charged by connecting to the mains supply for approximately one hour before use. The internal display shows the charge level.

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## INSTRUCTIONS

### Charging process:

To charge the battery of the portable hand igniter, connect the supplied power cable to the supply voltage. Depending on battery condition, charging can be up to one hour. When fully charged, the charger changes to trickle charge mode. The portable igniter can be left connected to the power supply when not in use, ensuring that the unit is available at all times for immediate use.

If the igniter provides a poor spark the battery should be recharged. Batteries are replaceable so in the event of reduced sparking time replace the batteries with the approved battery type only. See page 3 for battery install details.

Operation process:

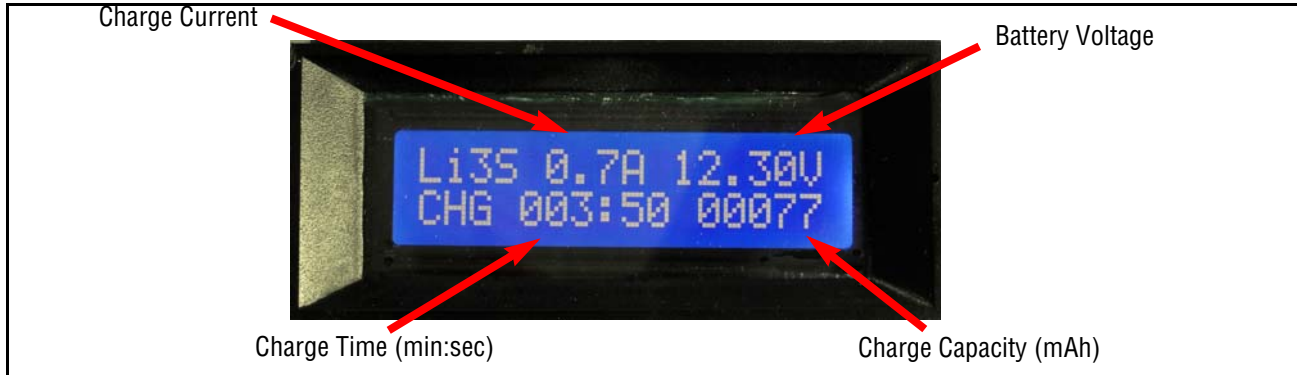
To operate, position the electrode, turn on the power using the “I/O” switch, then press and hold the pushbutton, while checking for ignition. Remove from the combustion zone as soon as is practicable.

Maintenance:

If the igniter provides a poor spark the battery should be recharged. Batteries are replaceable so in the event of reduced sparking time replace the batteries with the approved battery type only.

After extensive use (in excess of 5000 sparks) the electrode may also require to be changed, with a replacement available from Fireye.

**FIGURE 1. DISPLAY**



## APPLICATION

Set the position of the HE-electrode, using the supplied distance ring as a stop for the insertion depth. Power the device with the black "I/O" Switch.

To create ignition sparks, press and hold the pushbutton, the sparks will start. For safety follow the following steps:

- 1 Always ensure that a purge has been completed before attempting an ignition.
- 2 Start the igniter before opening the gas release.
- 3 From release of gas from the burner, allow no more than 2 seconds, when in the event of no ignition close the gas supply. For light oil allow no more than 3 seconds.
- 4 Purge again before repeating an ignition.
- 5 After stable ignition of the fuel, the ignition electrode must be pulled back from the flame and the device must be switched off.



**Warning:** This unit is not for continuous operation!

**Scope of supply:**

- 1x Power cable. Provides connection to 100 to 240V 50/60Hz.
  - 1x Distance ring. Optional item, used to set the electrode insertion depth.
  - 1x Carrying strap.
  - 1x High energy igniter pack with igniter cable and handle.
  - 1x Set of internal batteries
- (The ignition rod is not included in the scope of supply and must be ordered separately).

**Model: With exchangeable ignition electrode, (Shown with optional retaining ring)**




**3 units of 3000mAh ICR18650 3.7V Li-ion**


## SPECIFICATIONS

Ignition voltage:	2 kV
Ignition frequency:	2 Spark / sec @ 4 Joules
Maximum ignition period:	30% duty cycle
Capacity:	approx. 3 h
Input voltage: (For charging the accumulator)	100-240V, 50/60Hz
Protection level:	IP 42
Allowable operation temperatures:	
Control unit:	-20°C to +65°C
Ignition tip:	+650°C Short time peak 800°C
Dimension (LxWxH):	210 x 120 x 90mm
Control unit:	Polyester fiberglass reinforced
Weight: HEP	approx. 3.8 kg
Igniter rod lengths:	500mm up to 1500mm (500mm - 0.7kg, 1mtr - 1.3kg, 1.5mtr - 2.0kg)
Igniter rod diameter:	15mm Stainless Steel
Max. current consumption:	1.2A
Battery type:	3000mAh ICR18650 3.7V Li-ion (Li-ion only)

Optional or Spare Parts:

Battery pack: HEP-BP Consists of 3 each DIV.AKKU 3,7V 3000MAH

Spacer Ring:  HEP-SR Used for fixing the correct insertion depth for the ignition rod

Ignition rod:  HEP-IR0,5 Ignition rod with 500mm length  
HEP-IR1,0 Ignition rod with 1,5m length  
HEP-IR1,5 Ignition rod with 1,5m length

Retainer ring:  HEP-RetR for fixing the ignition rod

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**Please note:**

The User must comply with the general electronic instructions and local codes and if necessary the Ex-instructions.

**During the ignition process 2kV are available on the ignition electrode. Do not touch, danger to life!!!**

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## NOTICE

When Fireye products are combined with equipment manufactured by others and/or integrated into systems designed or manufactured by others, the Fireye warranty, as stated in its General Terms and Conditions of Sale, pertains only to the Fireye products and not to any other equipment or to the combined system or its overall performance.

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## WARRANTIES

FIREYE guarantees for 18 months *from the date of installation or two years from date of manufacture* of its products to replace, or, at its option, to repair any product or part thereof (except lamps, electronic tubes and photocells) which is found defective in material or workmanship or which otherwise fails to conform to the description of the product on the face of its sales order. **THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES AND FIREYE MAKES NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.** Except as specifically stated in these general terms and conditions of sale, remedies with respect to any product or part number manufactured or sold by Fireye shall be limited exclusively to the right to replacement or repair as above provided. In no event shall Fireye be liable for consequential or special damages of any nature that may arise in connection with such product or part.

(Note: Batteries and ignition rods are consumables and not covered under warranty.)



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