

# SureFire™ High Tension Igniter & High Tension Spark and Sense



## SUREFIRE™



### High Tension Igniter type HTI / HTSS

The HTI/HTSS igniter is a reliable source of ignition for natural and forced draught gas igniters and pilots as well as small capacity gas burners. It is designed to ignite a mixture of various types of gaseous fuels with air.

Typical fuel gases for HTI/HTSS igniter are: Natural gas, Propane or LPG gases. In case of or Refinery off gases, especially including high hydrogen, sulphur compounds like hydrogen sulphide and other chemicals increasing the corrosion rate, and in case of other waste gases, like low calorific value gas or wet and dirty gas consult Fireye.

HTSS can be used as a “Spark & Sense” igniter i.e. as igniter with additional flame safeguard operation mode based on the principle of measuring of the ionization current in electrically conductive ionized gas in a flame. This flame detection method used in HTSS is called ionization (rectification) method.

### FEATURES:

- The design of the unit provides a very stable electric arc and repeatable ignition.
- The use of interchangeable tips and no adjustable parts ensures long operation with low maintenance costs.
- This type of igniter rod design provides trouble-free reliable performance in gas applications, which are relatively clean.
- Spark and Sense feature (-SS) allows for flame sensing via flame rod.
- Available in ATEX, hazardous area classification.

HTI

HTSS

HIGH TENSION IGNITER &  
HIGH TENSION SPARK AND SENSE



## TECHNICAL DATA

Power supply voltage; current:	230/110(115) VAC (50/60 Hz); 0.5/1.2 A (230/110 VAC)
Ignition HT transformers:	input, output, weight, dimensions:
– P/N <b>TX-230-8000</b> input:	230 VAC at 0.5A; output: 8000 VAC, 15 mA, 100% duty cycle
– P/N <b>TX-110-8000</b> input:	110/115 VAC at 1.2A; output: 8000 VAC, 15 mA, 100% duty cycle
weight, dimensions:	1.8 kg, LxWxD 107x87x64
Method of operation:	electrical arc
Ignition control signal:	24 VDC, max. 12A (20A peak)
Available rod insertion length L1:	0.65 ÷ 3.15 m
Rods and tips outer diameter, material:	Ø16 mm, 316 SS
Rods optimal electrical operation parameters:	15-20 mA at 7,500–10,000 V
Rods and tips:	operating temperature, IP rating, weight:
– P/N <b>HTSS-xxx-J</b>	-40°C ÷ +100°C, IP67 (j. box), +200°C rod tube; L1=0.65 m - 0.77 kg
– P/N <b>HTSS-xxx-CEX</b>	-40°C ÷ +80°C, IP66 (cable entry), +200°C rod tube; L1=0.65 m - 1.00 kg
– P/N <b>HTSS-xxx-J-CEX</b>	-40°C ÷ +80°C, IP66 (j. box), +200°C rod tube; L1=0.65 m - 1.73 kg
Rods weight adder:	approx. 0.44 kg / meter
– Tip P/N <b>HTR-TIP</b>	length 160 mm, 0.16 kg; <b>caution:</b> used on rods lengths L=0.5, 0.6, 0.7 only
– Tip P/N <b>HTR-TIP-L</b>	length 460 mm, 0.32 kg
Tip operating temperature:	+300°C tip continuously, over +1,000°C in flame for short period central Kanthal electrode over +1,000°C continuously
Power packs: operating temperature, IP rating, weight, material:	
– P/N <b>HTSS-PP-230/110</b>	-40°C ÷ +65°C, IP66, 6 kg; C. Steel powder-coated or option S. Steel
– P/N <b>HTSS-PP-230/110-CEX</b>	-40°C ÷ +65°C, IP66, 20 kg; Cast Alum. powder-coated or option S. Steel
HV ignition single wire cable data:	
– P/N <b>HT-CAB-5:</b>	type FZ-LSi, OD 7 mm, 15kV, wire 1.0 mm <sup>2</sup> , oper. temp.: -50 +180°C
– P/N <b>HT-CAB -5-CEX:</b>	type FZ-LSlekw, shielded, OD 8 mm, 15kV, wire 1.0 mm <sup>2</sup> , oper. temp.: -50 +180°C
– P/N <b>HT-CAB-5</b> and <b>HT-CAB-5-CEX (5 m working length)</b>	weight: 0.37 kg and 0.42 kg

Fireye is a leading manufacturer of flame safeguard controls and burner management systems for commercial and industrial applications throughout the world. Our products can be found in a variety of public buildings, commercial properties, power plants, pulp and paper mills, petrochemical facilities and food processing plants. Fireye is a part of Carrier (NYSE: CARR).



[fireye.com](http://fireye.com)

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