

FF703

UV/IR Universal Test Torch

General

The FF703 is a microprocessor based flame simulator for the testing of UV or IR or UV-IR flame detectors. It eliminates the need to use a flame. This unit is designed to generate a wide range of optical output signals, including various channels of infra-red to test dual infra-red detectors. It can also emit 'flickering' infra-red signal to test for false alarms.

Flame detector characteristics

Most optical flame sensors respond to Ultra Violet (UV) and or Infra Red (IR) radiation emitted from flames during combustion. Many sensors also use flame flicker techniques to distinguish between flames and other optical false sources.

The test unit simulates the flickering flame signal by modulating the output of a filament lamp. The thermal time constant of a filament lamp prevents the generation of a perfect flame flicker signal. The slow response of the filament lamp will mean that some flame sensors many require more time to activate under test than they would with a real flame.

Operation

The unit is intended for service engineers to use when performing commissioning and routine maintenance. As the test unit does not have an (Ex) approval for hazardous areas, a permit would be required to check a detector in such areas. The service engineer could also carry a portable flammable gas alarm to indicate if the area is safe for testing.



Details

- Wide spectral output - UV, Visible, Near IR, Mid-IR
- Tests many flame sensors types - UV, UV/IR, UV/IR², IR³, IR², IR
- Portable with rechargeable NiCd battery pack and charger
- Selectable optical output type
 - Constant illumination
 - Regular flashing sources (Range of frequencies)
 - Irregular flickering sources (Resembling flames)
- Selectable optical output intensity with LED bar graph indication
- Range typically 3 metres and beyond
- 30 Second timeout on each test
- Auxiliary 24 VDC supply for testing

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Technical specifications

Electrical

Charger input voltage 85 - 265 VAC @ 47 - 440Hz

Test unit battery voltage 24 VDC NiCd

Test unit auxiliary 24 0.1 A max.

VDC output current

Physical

Physical dimensions 260 x 90

128 x 60

Net weight 1 kg

Colour Black

Environmental

Operating temperature -15 to +50°C

Relative humidity 95% max. noncondensing

Environment Exd, Indoor, IS, Outdoor

IP rating IP54

Operating temperature -15°C to +50°C

Charger temperature 0°C to +50°C

Relative humidity 95% Non condensing

IP rating IP54

Mechanical

Test unit housing ABS and Noryl

Charger unit housing 94V-O polycarbonate

Colour Black

Dimensions (l x w x d) 260 x 90/128 x 60
mm

Weight 1 kg

Light source performance

Light source power 20 W max.

Beam angle 8° Cone

Spectral response 200 nm to 4.3 µm

Test range 5 m typical



As a company of innovation, Carrier Fire & Security reserves the right to change product specifications without notice. For the latest product specifications, visit ie.firesecurityproducts.com online or contact your sales representative.

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