

Note: Sub-system Doc. will be updated (wait for Drawings)

# Sub-system Data Sheet

## TFX-8050-EWF

### MicroFocus X-Ray Source (End Window Flat)

Contact TruFocus for any modification of Specifications for your application

FAMILY	TruFocus Ordered P/N	Min/Max Target Voltage (kV)	Min/Max Target Current (mA)	Maximum TUBE Power (W)	Focal Spot Size (um)	Beam Angle	Focus to Object Distance (S) (FOD, mm)	Operation
TFX	TFX-8050-EWF	25 / 50	0.02 / 1	8*	<= 8	57° +- 0.5°	22.3	Continuous

\*Maximum Tube Power depends on Focal Spot Size (FSS) and target material. See Tube Operating Power table below. 8 W for 8 um.

**TFX-8050-EWF** X-Ray source is part of the TruFocus 8000 series MicroFocus Tube family developed to fulfill the need for high resolution imaging for Industrial, Medical, Aerospace and Analytical applications. The <=8 μm Focal Spot Size produces exceptional image quality and sharpness.

To shorten X-ray system development time, a well matched High Voltage (50kV, 1 mA) power supply , an Analog or Digital (USB) Controller and Software Driver with full control graphic interface developed by TruFocus are available for driving and monitoring the TFX-8050-EWF source.

#### Operating Power (Continuous)

Maximum Tube Operating Power (W) of 8000 series is: 12 W

1W per 1 um Focal Spot Size (FSS) for Tungsten when FSS < 10 μm

Focal Spot Size (um)	Maximum Target Operating Power (Continuous) (W)
8	8
9	9
10	10 - 12

#### X-Ray Tube Specification

Tube Housing	Target Material	Window Material	Window Thickness	Window type	Operating Temp. & Humidity	Storage Temp. & Humidity	Cooling Method	Weights	Flux Stability
Encapsulated	Tungsten	Beryllium	0.01 “	End Window Flat	+10° to 55°C / 85% RH	0° to 60°C 85% RH	Air	2.5 lbs	<0.2%*

\*Relative Standard Deviation over 4 hours of continued operation.

#### TFX-8050-EWF

Drawing will be updated  
Cable size is different from 100 kV

OEM or for replacement only

#### TFX-8050-EWF (With Housing)

Drawing will be updated  
Cable size is different from 100 kV

Packaged in a metal housing with FAN

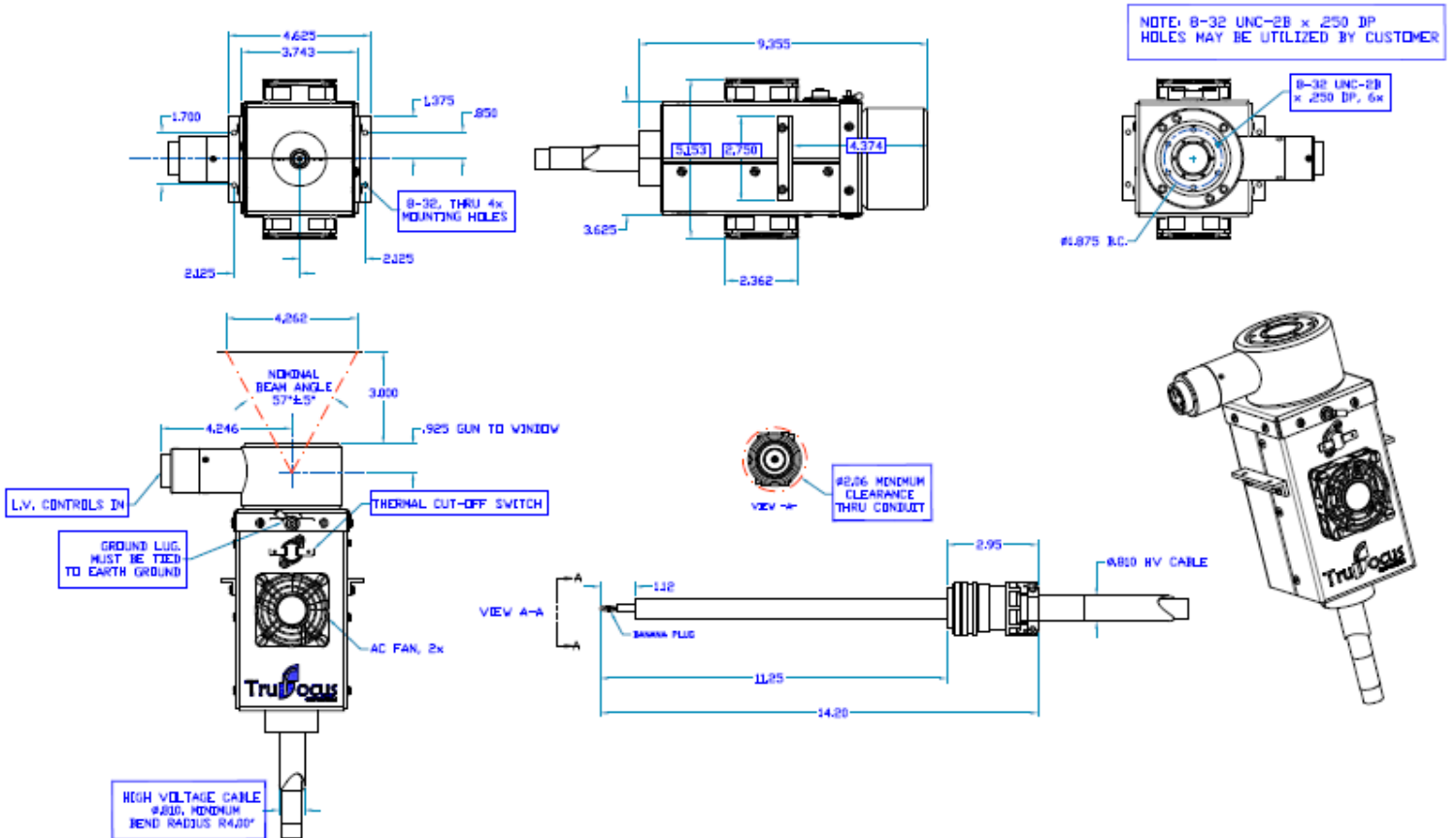
# OUTLINE DRAWING With FAN Housing

Drawing# & Version:	DW-TFX-8050-EWF-01
TruFocus P/N:	TFX-8050-EWF
Unit:	In

High Voltage Cable length can be modified based on Customer requirement and needs to be defined at the time of purchase order.

**Note:**

HV cable size shown in the drawing below is not the right size. The correct cable size should be smaller and drawing is to be updated.



# **OUTLINE DRAWING**

## **No FAN Housing**

**OEM or replacement only**

<b>Drawing# &amp; Version:</b>	<b>DW-TFX-8050-EWF-01</b>
<b>TruFocus P/N:</b>	<b>TFX-8050-EWF</b>
<b>Unit:</b>	<b>In</b>

**Outline Drawing is in process of being updated**

# **Caution**

## **X-Ray Radiation**



1. X-Ray radiation is harmful to the human body. It is necessary to take all safety precautions when operating this device.
2. The x-ray tube should be installed in an x-ray shielded cabinet to avoid exposure. It is recommended that the safety interlock system be used at all times.
3. It is the customer's responsibility to provide shielding for the use of this device.

## **Warranty Information**

This x-ray tube is warranted to be free of defects in materials and workmanship for a period of 365 days (1 year). This warranty is limited to repair or replacement of defective products only. This warranty replacement cost to customer shall be prorated over the duration of the warranty period. The warranty period commences on the date of installation, but no later than 30 days from the date of shipment from TruFocus to the customer. Any loss, damage, failure and/or malfunction relating in any way to accident, abuse, alteration, misuse, neglect, fitting, disassembly, attempted repair, storage, adjustments of the electronics, or failure to use the tube within the specifications or operating instructions provided by TruFocus, or the lack of proper routine maintenance and care of the tube or system in which it is installed are expressly denied coverage under this warranty.

Subject to local and technical requirements and regulations. Availability of product in this promotional material may vary. Please consult with our office staff for availability.

***Information furnished by TruFocus is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are subject to change without notice. Patent rights are granted to any and all of the circuits described herein. © 2013 TruFocus Corporation***