



- **32, 42 and 50kW all in the same footprint and volume**
- **Utilizes Spellman's own SPI interface (compatible with other Spellman CT generators)**
- **16/32 slice with 0.5 second rotation**
- **Supports Spellman's add on Grid Box Option**
- **Integrated anode drive (supporting ball or liquid metal bearings)**

Spellman High Voltage has been designing, manufacturing and providing CT generators for OEM customers for over three decades. We have unrivaled experience being the first provider of a CT generator used in a commercially available continuous rotating CT scanner in 1985. Since then Spellman has enhanced performance and developed new CT generators year after year, setting the standard for CT generator technology.

Spellman's CCT series of CT generators provide a unique combination of performance and price. Ideally suited for the economy 16 slice CT scanner, this generator has the ability to be scaled from 32kW to 50kW. Its compact size and unique bend makes it suitable for small footprint gantry designs. Designed to easily pair with many off the shelf CT tubes.

#### OPTIONS

- DG** Deflection Grid
- CG** Cutoff Grid

#### SPECIFICATIONS

##### Input Voltage:

- Main: 400Vac, three phase, +15%/-20%, 50/60Hz
- Auxiliary: 220/230Vac, single phase, +15%/-10%, 50/60Hz

##### Output Voltage:

- Range: 60kV to 140kV (bipolar, 30kV to 70kV)
- Accuracy: ±0.5% of setting

##### Output Current:

- Range: 10mA to 420mA, 50kW maximum.
- 10mA to 350mA, 42kW maximum.
- 10mA to 275mA, 32kW maximum.

##### Filament Output:

- Type: Two filament outputs, large and small
- Voltage/Current: 15Vac (30kHz-40kHz) @ 0-6A maximum, referenced to cathode output

##### Power:

- Maximum mA: 420mA, 50kW maximum
- Maximum kV: 140kV, 50kW maximum
- Peak: 50kW

- Maximum mA: 350mA, 42kW maximum
- Maximum kV: 140kV, 42kW maximum
- Peak: 42kW

- Maximum mA: 275mA, 32kW maximum
- Maximum kV: 140kV, 32kW maximum
- Peak: 32kW

##### Gantry Rotation: 0.5 seconds

##### Starter:

- Type: Dual Speed Starter
- Compatibility: All industry standard X-Ray tubes

#### GRID SPECIFICATIONS

Optional grid box for Deflection or Cutoff Grid



##### Deflection Grid:

The deflection grid (also called the Flying Focal Spot) allows for dynamic movement of the focal spot providing double X sampling which increases effective resolution while decreasing unwanted artifacts.

- Type: Deflection grid, single box assembly
- Input Power: 24Vdc, ±10% @ 4.2A maximum, negative input ties to chassis ground internally

##### Connectors:

- High Voltage Input: 3 pin 75kV Federal Standard (Cathode, Large, Small)
- High Voltage Output: 4 pin 75kV CA7 (Cathode, Large, G1, G2)

Number of Grids: 2 grids, switching out of phase

Bandwidth: DC to 5kHz

Output Voltage: 0V to -4KV, from grid to cathode. User input will command the bi-level grids to switch between adjustable voltages, V<sub>LOW</sub> and V<sub>HIGH</sub>. The two grids switch out of phase: If G1 is at V<sub>LOW</sub>, G2 will be at V<sub>HIGH</sub> and vice versa. The V<sub>LOW</sub> and V<sub>HIGH</sub> levels for G1 and G2 are independently adjustable from 0 to -4KV but V<sub>LOW</sub> range is constrained by:  $|V_{LOW}| \leq |V_{HIGH}|$

##### Cutoff Grid:

A cutoff grid truncates the high voltage at the end of the X-Ray exposure, reducing patient radiation dosing that does not contribute to the imaging process.

- Type: Cutoff grid, single box assembly
- Input Power: 24Vdc, ±10% @ 0.75A maximum, negative input ties to chassis ground internally

##### Connectors:

- High Voltage Input: 3 pin 75kV Federal Standard (Cathode, Large, Small)
- High Voltage Output: 4 pin 75kV CA7 (Cathode, Large, G1, G2)

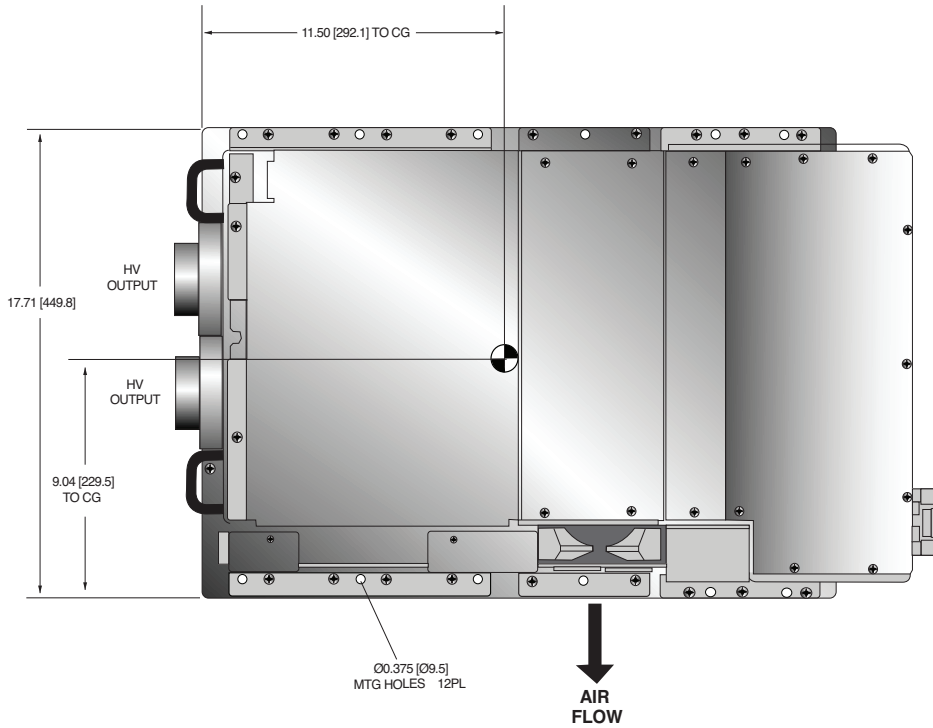
Number of Grids:

One, switched between "Zero" (0V ≥ V<sub>g-c</sub> ZERO ≥ -10V) and "Cutoff" (V<sub>g-c</sub> CUTOFF = -4KV ± 10% @ steady state)

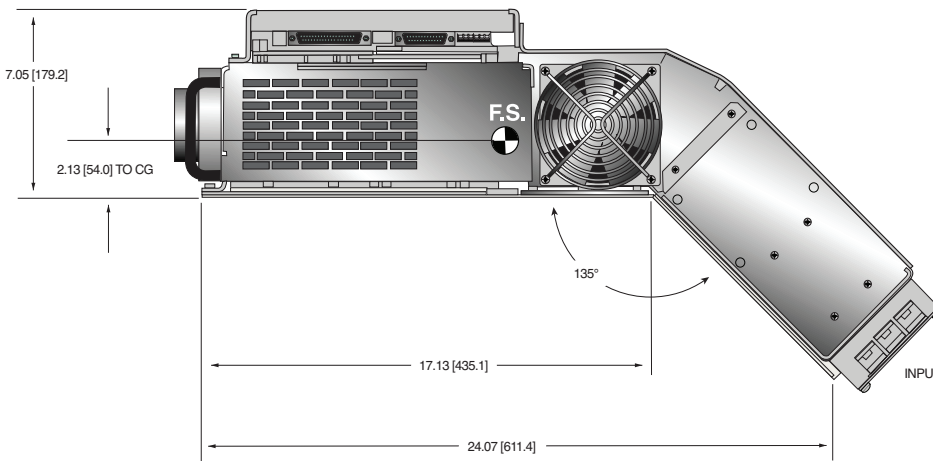
### CCT X-RAY GENERATOR

DIMENSIONS: in.[mm]

#### TOP VIEW



#### SIDE VIEW



#### How to Order:

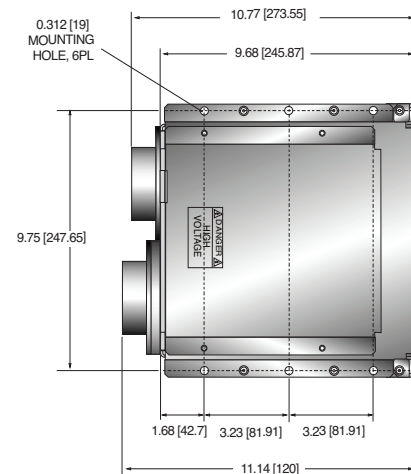
32kW maximum:	PART NO.: CCT70PN32
42kW maximum:	PART NO.: CCT70PN42
50kW maximum:	PART NO.: CCT70PN50

Consult sales for grid options

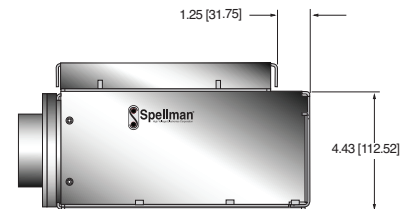
### DEFLECTION / CUTOFF GRID

DIMENSIONS: in.[mm]

#### TOP VIEW



#### SIDE VIEW



#### FRONT VIEW

