



# Star Tech Instruments

## BEM SERIES ENERGY PROBES



BEM-38-G

### Specifications

Spectral band	157 nm to 410 nm (see Table 1)
Clear aperture	25 mm diam. to 90 mm diam.
Responsivity	0.2 V/J to 1000 V/J, depending on model
Maximum repetition rate	up to 5000 Hz, depending on model
Damage threshold (pulsed beam)	0.6 Joules/cm <sup>2</sup>
Maximum linear fluence	see Table 2
Size	see Table 3
Dynamic range	at least 6 orders of magnitude

Table 1. Properties of the STI probe materials

Crystal type	C	R	G	P
Max clear ap. (mm)	90	90	25	38
Max. rep. Rate (Hz)	5000	300	5000	5000
Spectral bandwidth (nm)	150 to 225	150 to 310	X-ray to 410	190 to 310
Fluorescence decay time	6 μsec	4 msec	90 nsec	5 μsec

Table 2. Maximum linear fluence

Wavelength (nm)	C	R	G	P
193	300	50	10	30
248	300	250	10	30
308	n/a	400	50	50

Table 3. BEM dimensions;

All BEM's have a 5 inch long x 0.5 inch diam. handle; BNC connector at the end.

Model	Clear aperture (mm)	O.D. (mm)	thickness(mm)
BEM-25-X	25	63.5	6
BEM-38-X	38	76.2	6
BEM-50-X	50	85.9	6
BEM-90-X	90	127.5	6

-X is the crystal (C,R,G,P)

(1) Protected by one or more U.S. Patents.