

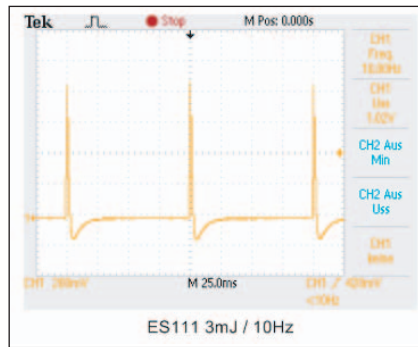
ES100 Series Pyroelectric Energy Sensors

The new ES100 Series Pyroelectric Sensors are designed for standard optical energy measurements. They directly convert the energy of a light pulse into a voltage pulse independent of the wavelength of the light field. Our pyroelectric sensors, which belong to the thermal detector family, have a black absorption coating with a flat spectral response ranging from 185nm to 25µm. The detectable energy ranges from 3µJ to 2J with repetition rates up to 100Hz. For best results, the detector diameter should be only slightly bigger than the beam diameter. The ES100 sensors come in three aperture sizes: 11mm, 20mm, and 45mm.

The sensors are equipped with a BNC connector that allows direct connection to an oscilloscope and a BNC-to-D-Sub converter with calibration data memory to plug into Thorlabs Energy Meters (See Page 955).

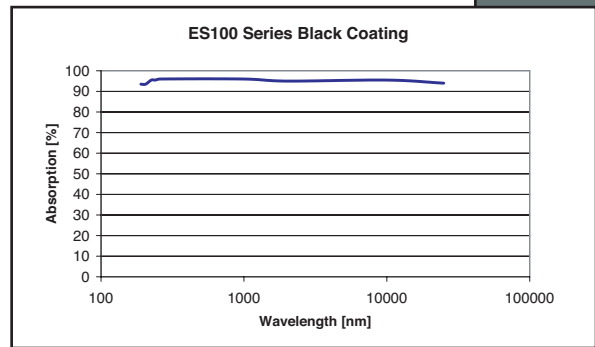


Posts, Post Holders and Bases Sold Separately



Features

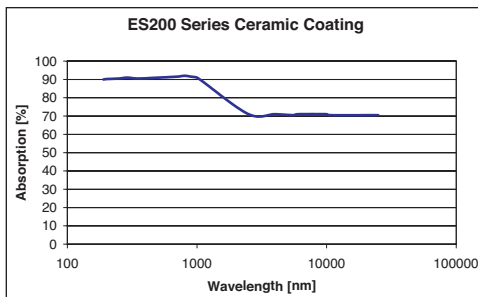
- Broadband Coating
- NIST Traceable Calibration
- **Thickness:**
ES111: 18mm
ES120: 16mm
ES145: 21mm
- Direct Oscilloscope Operation
- Isolated Post Adapter Included
- **Max. Power Density:** 8MW/cm² (10ns Pulse)
- **Max. Energy Density:** 150mJ/cm²



ITEM#	\$	£	€	RMB	DESCRIPTION
ES111	\$ 1,100.00	£ 693.00	€ 1,023.00	¥ 10,505.00	11mm Energy Sensor, 185nm-25µm, 150mJ/cm ²
ES120	\$ 1,150.00	£ 724.50	€ 1,069.50	¥ 10,982.50	20mm Energy Sensor, 185nm-25µm, 150mJ/cm ²
ES145	\$ 1,344.00	£ 846.70	€ 1,249.90	¥ 12,835.20	45mm Energy Sensor, 185nm-25µm, 150mJ/cm ²

ES200 Series High Energy Pyroelectric Sensors

The new ES200 Series Pyroelectric Sensors for optical energy measurements are designed for pulsed lasers with high energy densities such as Excimer, CO₂-TEA, Nd-YAG. The models feature high damage threshold, short time constants, high responsivity, and large apertures. The detector surface has a ceramic coating that is spectrally flat between 185-1064nm and 3-25µm. The detectable energy ranges from 500µJ to 15J with repetition rates up to 70Hz. The sensors are equipped with a BNC connector that allows direct connection to an oscilloscope and a BNC-to-D-Sub converter with calibration data memory to plug into Thorlabs' Energy Meters (see page 955).



Features

- NIST Traceable Calibration
- High Damage Ceramic Coating
- **Thickness:**
ES220: 18mm
ES245: 21mm
- Direct Oscilloscope Operation
- Isolated Post Adapter Included
- **Power Density:** 120MW/cm² (1064nm, 8ns Pulse)
- **Energy Density:** 970mJ/cm² (1064nm, 8ns Pulse)



Posts, Post Holders and Bases Sold Separately

ITEM#	\$	£	€	RMB	DESCRIPTION
ES220	\$ 1,500.00	£ 945.00	€ 1,395.00	¥ 14,325.00	20mm Energy Sensor, 185nm-25µm, High Damage Threshold
ES245	\$ 1,700.00	£ 1,071.00	€ 1,581.00	¥ 16,235.00	45mm Energy Sensor, 185nm-25µm, High Damage Threshold