# Hudson<sup>™</sup> 785 Non-Contact Raman Probe

High-performance sampling for quantitative analysis

Tornado's Hudson™ 785 Raman Probe is a high-performance optical interface which enables even the most demanding process monitoring or lab applications. Its optical design is optimized for compatibility with Tornado's HyperFlux™ PRO Plus analyzer and can be used for the superior representative sampling and measurement reproducibility for liquids, solids, slurries, powders, and heterogeneous mixtures. The interchangeable non-contact optics modules allow for a variety of sample types and containers.



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### **KEY FEATURES**

- Probe head optics optimized (étendue-matched) to spectrometer, further boosting the game-changing throughput efficiency of Tornado Raman analyzers
- Interchangeable non-contact optics
- Compact size and shape, fits into constricted spaces
- Uses robust single-core fiber optic cables (instead of fiber bundles) which can run long distances and be connected to a multiplexer



### **KEY APPLICATIONS:**

- Pharmaceutical solids, feed frame (mounts to most commercial devices, powder blending, tablets (blend uniformity, API content)
- Polymer pellets and films (composition and property measurement)
- Biotech liquid samples can be measured through glass containers or site windows

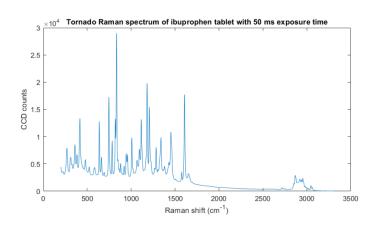


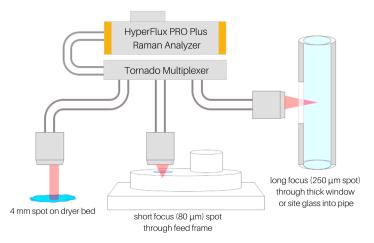


### **PERFORMANCE**

The Hudson™ 785 Raman probe generates high SNR spectra even at short exposure times.

## HUDSON™ 785 FLEXIBLE SAMPLING OPTIONS





# Device Specifications SIZE 2.16 x 1.77 x 1.01 in (5.5 x 4.5 x 2.6 cm) WEIGHT 0.75 lbs (0.34 kg) EXCITATION WAVELENGTH 785 nm OPERATING TEMPERATURE 0 to +40 °C NON-CONTACT OPTIC OPTIONS Three different non-contact optic modules are compatible with each probe head (see table to right) OPTICAL FIBER CONNECTIONS FC/PC 105 μm NA=0.22 fiber optic cable for excitation FC/PC 300 μm NA=0.22 fiber optic cable for collection

Available Optics Attachments			
	FOCAL LENGTH	SAMPLE DISTANCE	SPOT DIAMETER
SHORT FOCUS OPTIC	8 mm	5.2 mm	80 µm
LONG FOCUS OPTIC	25 mm	22.3 mm	250 μm
LARGE SPOT OPTIC	infinite	5 to 500 mm	4 mm

Users can quickly and easily swap the optics to match their specific needs



