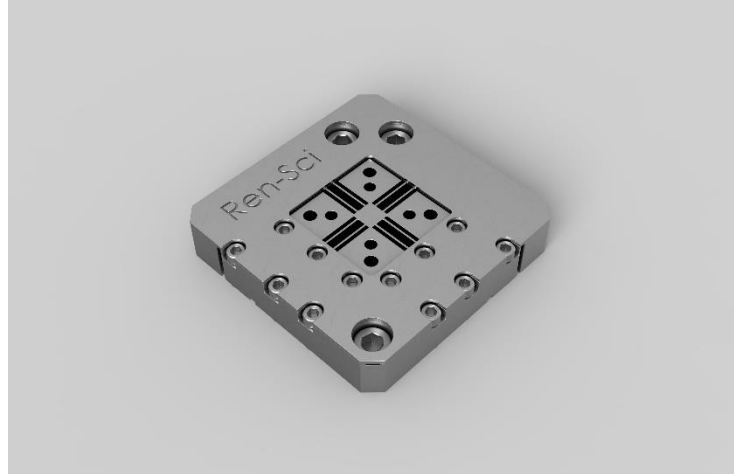


CryoScan-340 Series

Cryogenic XY Piezo Driven Flexure Scanner



Description: The CryoScan 340 is a piezo driven, fine positioning/fine scanning stage that runs on a DC high voltage input signal. The flexure design is free of friction and stiction and has a motion amplification factor of 2.3x the input displacement.



Technical Specifications:

| | |
|----------------------------|--|
| Scan Directions | XY (planar) |
| Scan Range 300K | 40 μm |
| Scan Range 4K | 12 μm |
| Capacitance (X/Y) | 600 nF |
| Lowest Resonance Frequency | 3800 Hz |
| Stiffness | 16 N/ μm |
| Actuation | Thickness Mode PZT (unipolar) |
| Drive Amplitude (V) (300K) | -100 V / +100 equal and opposite voltage swing |
| Drive Amplitude (V) (4K) | -175 V / +175 equal and opposite voltage swing |
| Materials | Ti (CP grade 2), PZT ceramics |
| Magnetization | < 10 nT |
| UHV Compatibility | To 1.0×10^{-11} mBar |
| Bakeout | To 120°C |
| Interface | Touchscreen |

