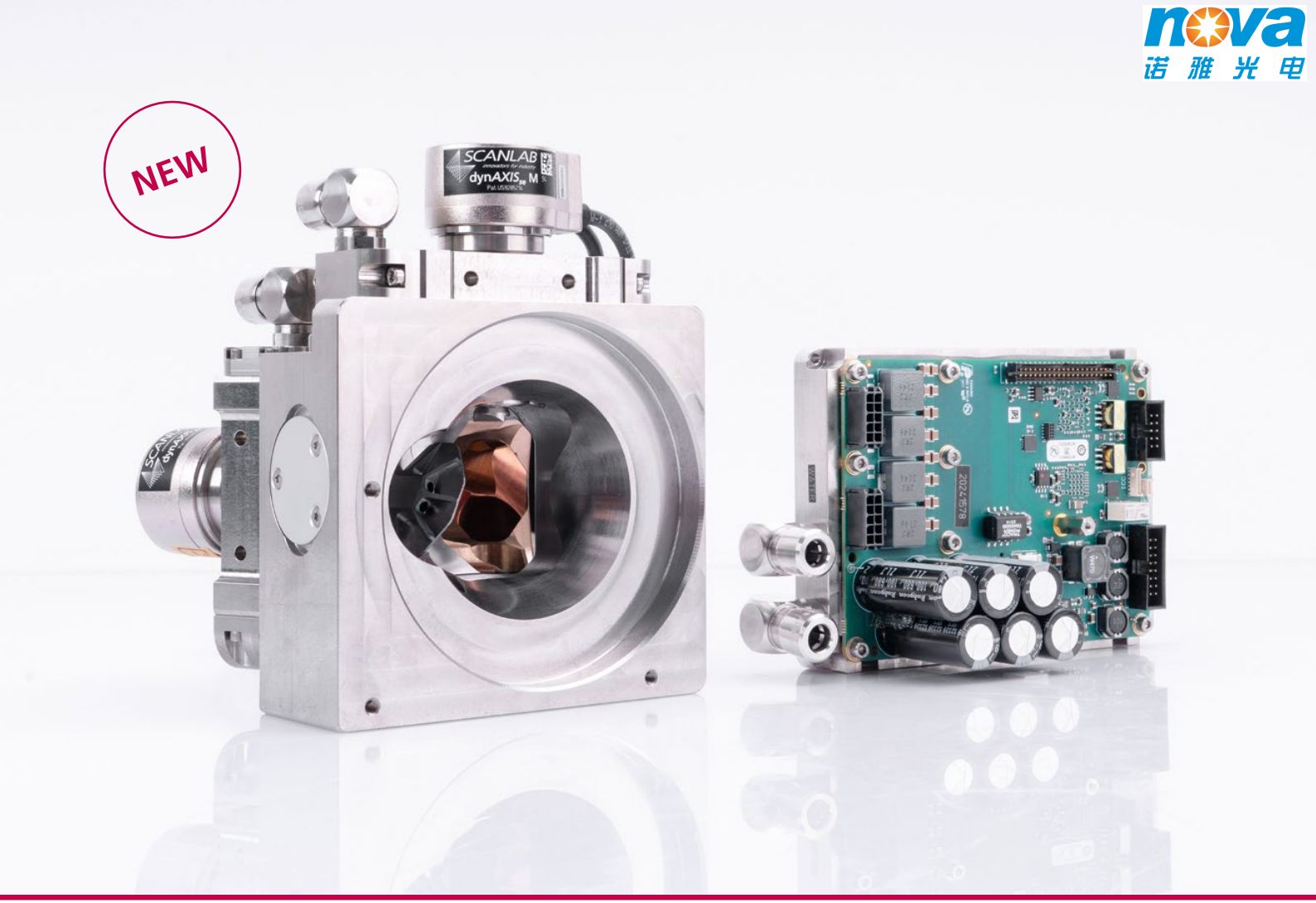


excelli*DRILL* – high performance drilling

excelli*DRILL*

Key Features

- Outstanding drilling rates are made possible by significantly reduced step response times
- New motor design with improved thermal management
- Lightweight beryllium mirrors
- Digital dyn*AXIS*$_{se}$ encoder technology
- Automatic jump delay setting for all jump lengths [1]

Typical Applications

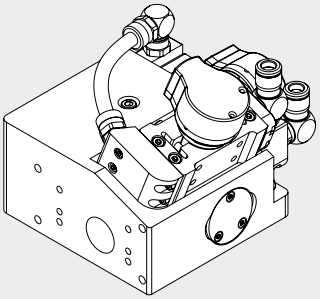
- PCB industry
- Via hole drilling
- High density interconnects (HDI)

Specifications

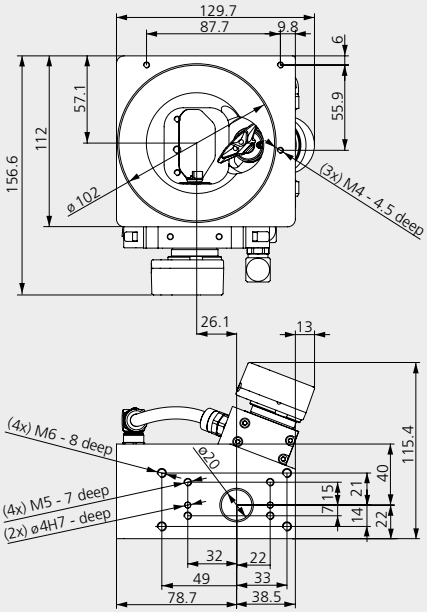
Aperture	20 mm
Maximum scan angle[2]	± 0.349 rad
Wavelength[3]	9400 nm
Step response (positioning and settling to ±5 µm at 100 mm focal length)	0.13 ms at 0.2 mm 0.22 ms at 0.5 mm 0.29 ms at 1 mm
Temperature drift[2]	Offset: < 10 µrad/K Gain: < 4 ppm/K
Long-term drift[2] (8-hour-Drift after 30 min warm-up, at constant ambient temperature and load)	Offset: < 15 µrad Gain: < 20 ppm
Power supply requirements	48 V, 3 A (RMS)
Water cooling requirements	3 l/min at 20 °C and Δp < 1 bar, p < 4 bar

[1] RTC6 control board required
[2] all angles are optical angles
[3] others on request

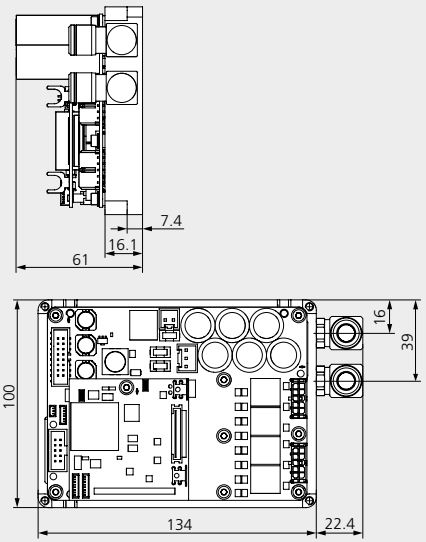
excelli*DRILL* Module Layout



excelli*DRILL* Module Dimensions



Digital ISB Servo Board Dimensions



all dimensions in mm