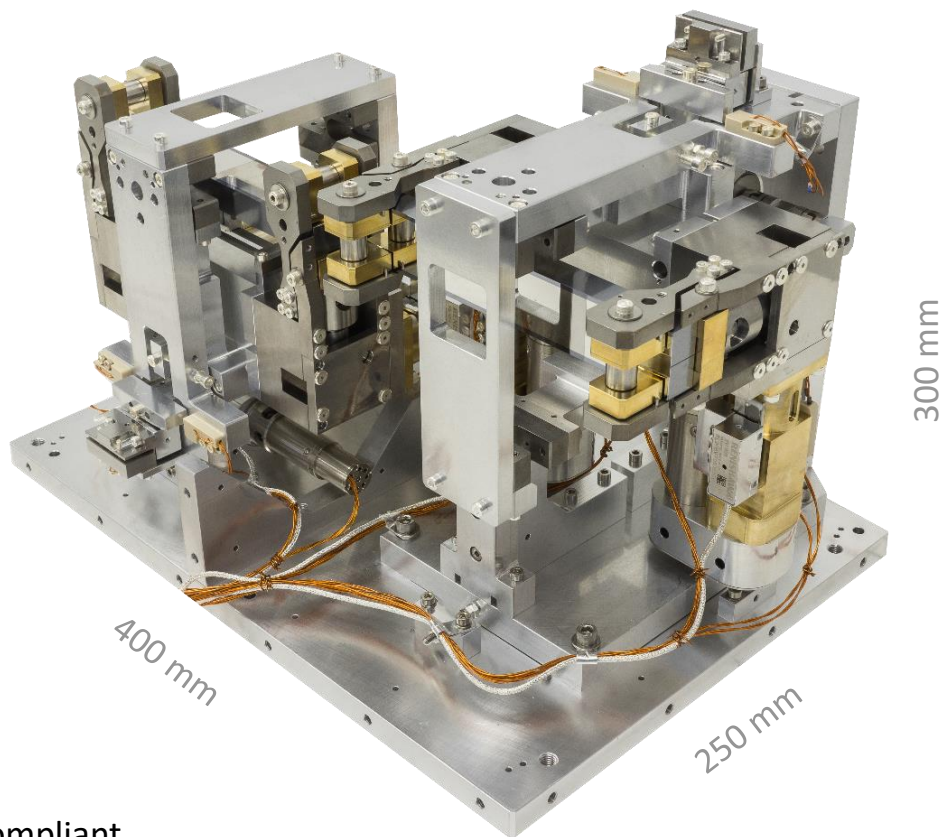


## Compact nano-KB system | n-KB

The finest x-ray beam in the smallest footprint

- Focal distance < 150 mm
- Mirror shape correction < 1 nm rms
- Elliptical profiles < 100 nrad rms
- First Eigen frequency > 130 Hz



- UHV compliant
- Fine mirror position control
- No twist induced & no thermal drift

# Compact Nano-KB system | n-KB

## Technical specifications

### Mirrors

Mirrors sizes	From 100 to 300 mm
Mirrors coating	Metal coating, B <sub>4</sub> C or multilayer

### Benders

Type	Force-driven bender
Bending resolution	$\Delta R/R \leq 0.01\%$
Bending range	From ~40 m to $\infty$
Elliptical profile error (bent conditions)	< 100 nrad rms / target shape
Long term shape stability	< 1 nm rms
Sagittal slope error	< 0.4 $\mu$ rad

### Motions stages

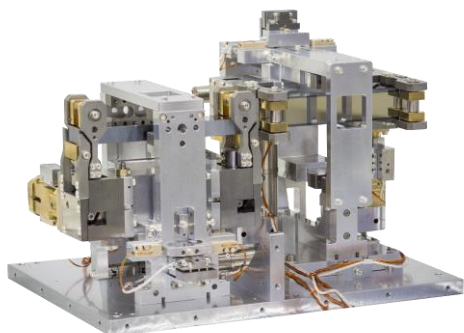
Pitch rotations (resolution / repeatability)	down to 150 nrad
Option translation stages (resolution / repeatability)	down to 200 nm

### Actuators (benders and motions stages)

Motors type	2-phase steppers / supply current < 1.5 A
Encoders type	Absolute optical encoders
Limit switches	3 $\mu$ m repeatability NC electrical switches

### General

First Eigen frequency	> 130 Hz
Typical dimensions (L x W x H)	400 x 300 x 250 mm
Weight	< 25 kg



### Main features

<b>Focal distance</b>	down to 100 mm
<b>Optical configurations</b>	All
<b>Vacuum compatibility</b>	UHV
<b>Cooling</b>	Optional
<b>Vacuum chamber and support</b>	Optional On-demand design and manufacture

Phone: +33 (0)4 76 44 12 96

[irelec@irelec-alcen.com](mailto:irelec@irelec-alcen.com)

[irelec-alcen.com](http://irelec-alcen.com)

20 rue du tour de l'Eau | F-38400 ST Martin d'Hères

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