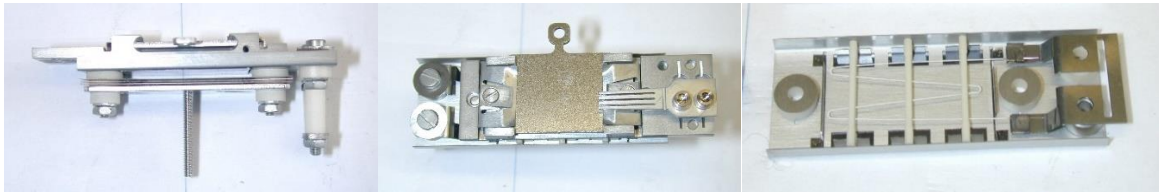
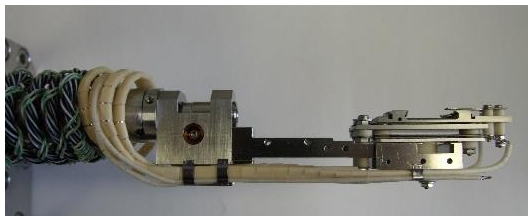


## E-Beam Heater Upgrade Package For Standard Scienta Omicron Manipulators

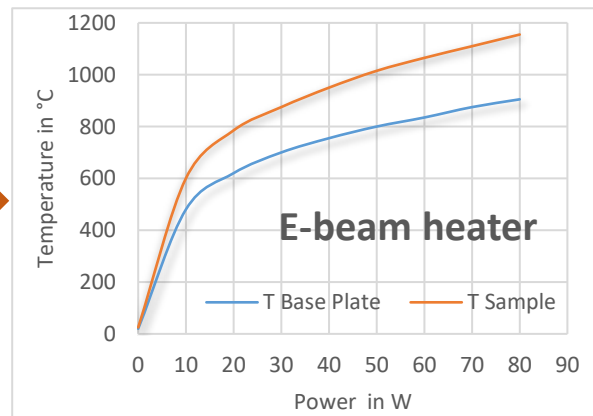
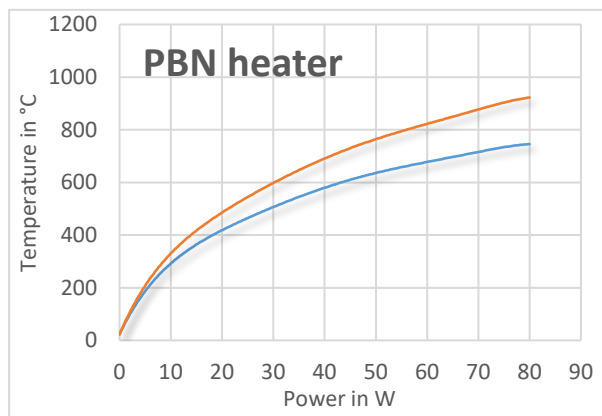


Scienta Omicron manipulators can easily be upgraded with an **E-Beam Heater Package** to let your system **benefit** from its special functionality compared to a standard PBN heater. Containing all required parts, the **package** comes pre-assembled for easy on-site implementation.



### Benefits:

- Max. sample temperature: 1100°C @70 W
- Faster temperature ramping: 32 K/s @2.3 A
- Local heating of sample directly



The direct electron bombardment of the electron beam heating is very local. While the sample heats up, surrounding parts keep comparably cool. As a consequence, chamber pressure increases are kept minimal and pressure as well as sample temperature recover on a faster time scale compared to standard PBN heaters.

### Package:

- Pre-assembled e-Beam heater with in-vacuum wiring and ceramics
- 6 Pin Amphenol current feedthrough and corresponding crimp connectors
- E-Beam heater power supply with temperature controller and ex-vacuum cable
- Ex-vacuum cable for direct heating

On request, an in-vacuum thermocouple and corresponding feedthrough can be added to the package. Please note that several spare parts are available to ensure maintenance and support for your e-Beam heater.

For installation support, please ask for our skilled Scienta Omicron service personnel. Please contact your local Scienta Omicron representative for more information:

<https://www.scientaomicron.com/en/contact-us>

## Summary

Part Number PN06358-S

### Parts included:

- E-beam heater, in-vacuum cables and ceramics
- 6 pin Amphenol feedthrough, crimp connectors
- E-beam heater power supply with temperature controller, cable
- Cable 6 pin to banana plug for DH heating

### Prerequisites:

Applicable to standard Scienta Omicron manipulators with

- PBN resistive heater facility
- No cooling or IN<sub>2</sub> cooling (no He cooling)
- Only one sample stage
- Only one (primary) rotational axis
- Up to one DH brush
- Scienta Omicron standard sample plates
- No further specials like 4 contact sample stage, special non-magnetic or oxygen resistive head, silicon diode, ...
- Type LEMO thermocouple feedthrough

### Options:

- E-Beam heater including support arm ready to be mounted on manipulator rotary drive shaft with 9.5 mm diameter
- Adapter arm for manipulators with tungsten wire heater
- Power supply for direct heating