NIRDot® 3D-System





Efficient and Effective Design

The adphos NIRDot 3D-System is a focused, high energy-density tool that delivers near laser like performance at a fraction of the cost when compared to laser systems.

Designed specifically for 3-dimensional printing and spot focusing manufacturing applications, this compact heating module can be mounted nearly anywhere, including on automated robotic arms.

A power supply sends 150 Watts via our patented adphosNIR $^{\! \otimes \! }$ emitter, where and when you need it most.

Variable power can be focused as small as 5mm in diameter at a high watt density ($\sim 8MW/m^2$) with an included light shield to reduce visible light.

An on-board fan can provide heated air to your drying process or be exhausted away for pure heating applications.

Applications

- Drying and sintering water- and, solvent-based inks for printing directly onto 3D shapes.
- Melting of plastic particles for 3D additive manufacturing process
- Drying and sintering functional layers in 3D printing systems
- Thermal processing (e.g. forming of plastics, soldering, brazing)

Specifications for NIRDot 3D-Systems:

88-264 VAC, 50/60 Hz
150W
Ømin. 5mm (0.2 in) at 2mm (0.08 in)
distance from heated opening
Air cooled with internal fan
Convertible between air blowing on
heated area or away
Switch on electrical box
Potentiometer on electrical box
Electrical box with 3m (10 ft) power cable
and 3m (10 ft) module supply cable
Aluminum
Ø62mm (2.44 in) x 124mm (4.88in)

