adphosLITE®-3D

Energy Focused to a Pinpoint

The adphos aLITE® energy source (advanced Light Initiated Thermal Emission) takes heating, drying and curing to a new level.

Designed specifically for 3D printing and manufacturing applications, this compact heating module can be mounted nearly anywhere.

- A remote laser diode with PLC controller sends
 50 Watts of 808 nm energy via light pipe right where you need it.
- Variable power can be focused between 1 mm to 10 mm in diameter with intelligent energy control to match your process.
- A separate low power LED is included to help position the aLITE® energy.
- Completely air-cooled. No costly water-water cooling required!

adphos aLITE®-3D applications include:

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





Technical Data:

Dimensions:

Central Unit: L = 500 mm

W = 180 mm

H = 465 mm (w/feet)

Focus Process Head: Ø_{max} = 57 mm

Height_{max}: 150 mm Focus: 150 mm \emptyset_{Focus} : 1 mm

(other focus possible)

Light Pipe: Length: up to 5 m

 \emptyset_{pipe} : 400 µm

Power: 230 VAC, 4 A, 50/60 Hz

aLITE®

Wave Lenght: e.g. 808 nm

(other wavelength possible)

Power: 50 W (optical)

Laser Class: 4

Position-LED

Wave Length: 650 nm Power: \leq 5 mW Laser Class: 3R

