



# primelite ALE/1

## High Performance Multispectral LED Light Engine

### Modular Platform Concept for Numerous Applications



#### Highlights

- Up to 30 Watts of UV
- Future-proof mercury-free light source
- LED process stability and TCO benefits
- Customized spectral composition
- Closed loop controlled output
- Easy to integrate in new and existing setups with no external cooling required

#### Maximum Performance and Modularity

ALE/1 high-performance LED light engines are Primelite's ready-to-use solution for demanding applications. They combine radiation power and spectral characteristics of a mercury arc lamp with the TCO and process benefits of LED technology.

Following a platform concept approach the ALE/1 is capable to combine up to 5 high performance LEDs in the optical path. This allows for significantly elevated radiation power levels across a broad output spectrum. Regarding the spectral composition of ALE/1 systems, there is an almost unrestricted choice: LED-Modules in the NUV (365, 385, 405nm), VIS (435, 470, 520, 620, 660, 690nm) and NIR (730, 770, 810, 850, 970nm) ranges are available.

An intuitive user interface as well as extensive possibilities to set up each LED-Module and general exposure parameters help you to manage your processes.

#### Exemplary Configurations

	ALE/1.1	ALE/1.2	ALE/1.3	
Main scope of application	Photolithography 3D-Printing	3D-Printing UV-Curing	3D-Printing UV-Curing	Photolithography
Number of Emitters	1 LED Monochromatic	2 LED Polychromatic	3 LED Polychromatic	3 LED Polychromatic
Emitters	365nm <i>or</i> 385nm <i>or</i> 405nm <i>or</i> 435nm	385nm 405nm	365nm 385nm 405nm	365nm (i-line) 405nm (h-line) 435nm (g-line)
Total radiation output*	up to 17,000mW	up to 20,000mW	up to 24,000mW	up to 28,000mW
Numerical aperture	0.6 (2 $\alpha$ 70°)			
Communication interfaces	Touch display, AUX, USB, PLC, and Fieldbus (e.g., CANopen)			
Dimensions (W H D) / Weight	28cm x 23cm x 40cm (11.0" x 9.1" x 15.7") / 15.0kg (33.1lbs)			
Power supply input	110-240VAC / 50-60Hz / 1,000W			

\* Full spectrum measured at the end of light guide (length 1.5m / diameter 8mm) /  $\pm$ 10% deviation possible



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