UV LASERS
for Marking and Micro Processing
The UV marking lasers in the PowerLine E UV series with a wavelength of 355 nm are suitable, in particular, for marking plastics but also for typical laser marking applications and micromaterial processing. The wavelength permits very small spot diameters and thus character heights < 100 μm.

Due to the high repetition rates, ROFIN UV lasers are highly suitable for marking plastics (ABS, PA) at extremely high processing speeds, as required for rapid industrial production processes, as well as high-precision marking/structuring on glass and/or ceramics with high peak performance without thermal impact.

The lasers of the PowerLine UV series also deliver excellent quality for micromaterial processing such as the cutting of flexible circuits, PCBs and copper. Our UV lasers are available in different power classes.

**YOUR BENEFITS**

- High marking speed
- Outstanding beam quality
- Low operating costs
UV LASERS AT A GLANCE

TECHNICAL DATA POWERLINE E UV 5-355

### Laser head
- Wavelength (nm): 355
- Average power (W): 3 @ 30 kHz
- Pulse frequency (kHz): 20 – 200
- Beam quality: TEM_{00}
- M²: 1.3
- Pulse width (ns): < 20 @ 30 kHz
- Energy per pulse [J]: 100 @ 30 kHz
- Peak power (kW): 5 @ 30 kHz
- Weight (kg): 19
- Dimensions [W x D x H, mm]: 118 x 500 x 251
- Ambient temperature range (°C): 15 – 35
- Ingress protection: IP 54
- Air flow laser head [m³/h]: max. 100

### Marking unit
- Field size (mm): variable
- Weight (kg): approx. 3 (without objective)
- Ingress protection: IP 54

### Supply unit (19")
- Supply unit dimensions: 19", 3 rack units
- Supply unit weight (kg): approx. 28
- Software: VLM
- Air flow 19" supply unit [m³/h]: 320
- Power supply: 115 - 240 V/ 50/60 Hz
- Power consumption supply unit [W]: 550
- Ingress protection: IP 20
- External cooling necessary: no

Supply unit
### Laser head

- **Wavelength (nm):** 355
- **Average power (W):** @ 40 kHz
- **Pulse frequency (kHz):** 20 - 200
- **Beam quality:** TEM00
- **M²:** < 1.3
- **Pulse width (ns):** < 25 @ 40 kHz
- **Energy per pulse (µJ):** 200 @ 40 kHz
- **Peak power (kW):** 8 @ 40 kHz
- **Weight (kg):** 43
- **Dimensions (W x D x H, mm):** 250 x 881 x 171
- **Ambient temperature range (°C):** 15 – 35
- **Ingress protection:** IP 54
- **Air flow laser head [m³/h]:** –

### Marking unit

- **Field size (mm):** variable
- **Weight (kg):** approx. 3 (without objective)
- **Ingress protection:** IP 54

### Supply unit (19")

- **Supply unit dimensions:** 19", 3 rack units
- **Supply unit weight (kg):** approx. 28
- **Software:** VLM
- **Air flow 19" supply unit (m³/h):** 105
- **Power supply:** 115 - 240 +/- 10% / 50/60 Hz
- **Power consumption supply unit [W]:** 550
- **Ingress protection:** IP 20
- **External cooling necessary*:** yes (laser head)

*Optionally provided by the customer

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### Laser and galvo

- **Side view**
- **Bottom view**
- **Top view**
- **Front view**

### Supply unit

- **Supply unit dimensions:** 19", 3 rack units
- **Supply unit weight (kg):** approx. 28
- **Software:** VLM
- **Air flow 19" supply unit (m³/h):** 105
- **Power supply:** 230 VAC ±10, 1P / N / PE 50/60 Hz
- **Power consumption supply unit [W]:** 1.88 kVA @ 50 Hz
- **Ingress protection:** IP 20

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### Laser head

- **Wavelength (nm):** 355
- **Average power (W):** >2 @15 kHz
- **Pulse frequency (kHz):** 15 – 100
- **Beam quality:** TeM00
- **M²:** < 1.5
- **Pulse width (ns):** < 10 @ 15 kHz
- **Energy per pulse (µJ):** > 0.1@ 15 kHz
- **Peak power (kW):** > 10 @ 15 kHz
- **Weight (kg):** approx. 20
- **Dimensions (W x D x H, mm):** 118 x 500 x 220
- **Ambient temperature range (°C):** 15 – 35
- **Ingress protection:** IP 54
- **Air flow laser head [m³/h]:** –

### Marking unit

- **Field size (mm):** variable
- **Weight (kg):** approx. 3 (without objective)
- **Ingress protection:** IP 54

### Supply unit

- **Supply unit dimensions:** 19", 3 rack units
- **Supply unit weight (kg):** approx. 28
- **Software:** VLM
- **Air flow 19" supply unit (m³/h):** 105
- **Power supply:** 1 15 – 240 +/- 10 50/60 Hz
- **Power consumption supply unit (W):** 550
- **Ingress protection:** IP 20

### Cooling unit

- **Air flow:** 105