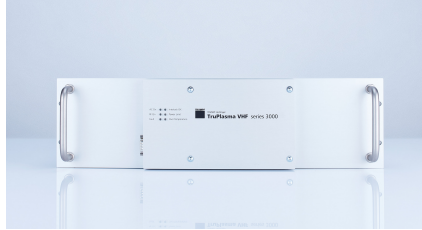


TruPlasma VHF Series 3000

Exploring new possibilities
with state of the art VHF platforms

Features

- 100 kHz pulsing
- Modular platform concept
- Smart Auto Frequency Tuning
- Reliable and sophisticated process control
- Accuracy by design – Planar RF design
- Patented CombineLine Technology



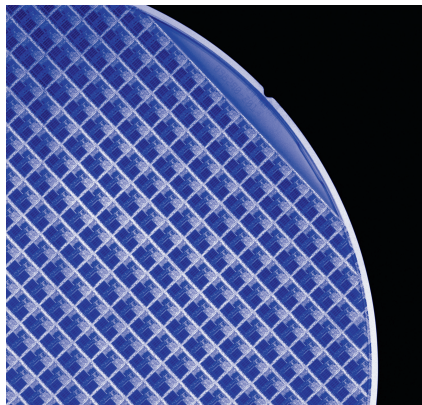
Applications

Semiconductor Applications

- Chemical Vapor Deposition (CVD)
- Plasma Enhanced CVD
- Etching Applications
- Atomic Layer Deposition
- Atomic Layer Etch
- Reactive Ion Etching

Industrial Coating Applications

- Tool Coating
- Hard Coating
- Decorative Coating



Benefits



Flexible adaption to the process



Extremely efficient and cost effective



Stable process power for best productivity and reproducibility



Substantial contribution to process homogeneity and highest uptime

TRUMPF



TRUMPF Hüttinger
generating confidence

Technical data

RF output	TruPlasma VHF 3000-5/40	TruPlasma VHF 3000-10/40
Output power	5 000 W	10 000 W
Rated power	5 000 W	10 000 W
Nominal load impedance	50 Ω	50 Ω
Output frequency	40 MHz	40 MHz
Networking connection data		
Line voltage	200 – 480 V	200 – 480 V
Line frequency	50 – 60 Hz	50 – 60 Hz
Line input power	9.3 kVA	18.6 kVA
Power factor	0.95	0.95
Communication interfaces		
Sync interfaces	yes	yes
Analog / digital	yes	yes
RS 232 / RS 485	yes	yes
EtherCAT	yes	yes
DeviceNet	yes	yes
Housing		
Weight	32 kg	53 kg
IP protection class	30	30
Cooling requirements		
Maximum water pressure	7 bar	7 bar
Minimum pressure difference	2 bar	2 bar
Minimum flow rate	8 l/min	10 l/min
Coolant temperature	5 °C – 35 °C	5 °C – 35 °C
General		
Overall efficiency	> 70 %	> 70 %
Certificates / standards	Semi S2, SEMI F47, UL, CE, RoHs	Semi S2, SEMI F47, UL, CE, RoHs
Ambient conditions		
Outside temperature	5 °C – 40 °C	5 °C – 40 °C
Humidity	5 % – 85 %	5 % – 85 %
Barometric pressure	79.5 kPa – 106 kPa	79.5 kPa – 106 kPa

Technical data

RF output	TruPlasma VHF 3000-10/60
Output power	10 000 W
Rated power	10 000 W
Nominal load impedance	50 Ω
Output frequency	60 MHz
Networking connection data	
Line voltage	200 – 480 V
Line frequency	50 – 60 Hz
Line input power	18.6 kVA
Power factor	0.95
Communication interfaces	
Sync interfaces	yes
Analog / digital	yes
RS 232 / RS 485	yes
EtherCAT	yes
DeviceNet	yes
Housing	
Weight	53 kg
IP protection class	30
Cooling requirements	
Maximum water pressure	7 bar
Minimum pressure difference	2 bar
Minimum flow rate	10 l/min
Coolant temperature	5 °C – 35 °C
General	
Overall efficiency	> 70 %
Certificates / standards	Semi S2, SEMI F47, UL, CE, RoHs
Ambient conditions	
Outside temperature	5 °C – 40 °C
Humidity	5 % – 85 %
Barometric pressure	79.5 kPa – 106 kPa