

Capable of synchronizing all HiPIMS and bias units in the HiPSTER series for the ultimate HiPIMS experience



HiPSTER Sync Unit

The HiPSTER synchronization unit allows the user to control the pulsing of up to eight HiPSTER HiPIMS powersupplies, compatible HiPSTER bias units, or compatible diagnostic hardware. This enables, for example, pulse trains synchronized between multiple units, or synchronized and delayed pulses. For increased flexibility, the HiPSTER synchronization unit can be triggered externally.

FEATURES

- Synchronized pulsing of up to eight units in the HiPSTER series
- Pulse trains with a fixed number of pulses at a fixed frequency
- Pulse trains synchronized between multiple units
- Synchronized and delayed pulses repeated at a common frequency
- Internal trigger available to synchronize other devices
- Can be triggered externally from another device acting as Master

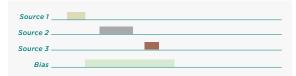
APPLICATIONS

- Multilayer deposition using more than one magnetron, where the user deposits a repeated sequence of layers with controlled layer thickness
- Co-sputtering of compounds from more than one magnetron
- Synchronized and delayed substrate bias for selective acceleration of ions, where different ionic species occur in the vicinity of the substrate at different points in time
- Synchronized HiPIMS process diagnostics by triggering external diagnostic equipment





Delay mode



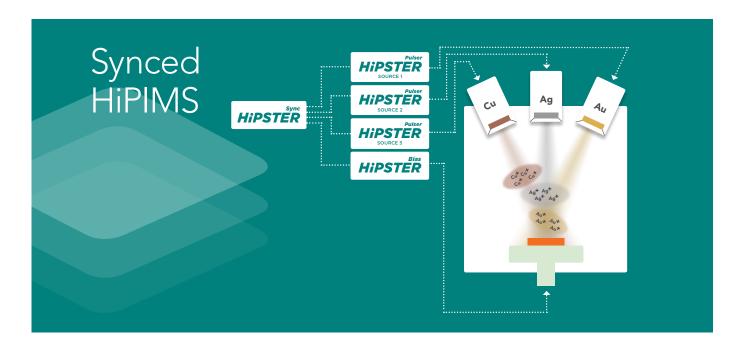
Burst mode



| Physical Specifications | |
|-------------------------|---------------------------------------|
| Casing type: | 19" rack (1U) |
| Dimensions: | 44 mm (H) x 483 mm (W) x 90 mm (D) |
| Weight: | 1 kg |

| Input Specification | |
|-------------------------|------------------------------------|
| Input Voltage AC: | 1 phase + N, 100-240 VAC, 50/60 Hz |
| Input Current at 230 V: | 0.07 A |
| Trigger Channels Out: | Ground-Referenced 5V CMOS input |

| Environmental Specifications | |
|------------------------------|-----------------------------------------------------------------------------------------------------|
| Operating Temperature: | +5°C to + 25°C |
| Storage Temperature: | -25°C to +55°C |
| Relative Humidity: | max 85% non-condensing |
| Air Pressure: | 80 kPa to 106 kPa |
| Cooling: | Air Cooling |
| Pollution degree: | 2 (or better). Cooling air must normally be free of corrosive vapors and conductive particles |
| Norms: | CE certified |





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