SPIK® 3000A

Superior Plasma Instant Kinetics

HiPIMS | Mid Frequency | Bias

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SPIK3000A Feature

- FPPG (Free Pulse Pattern Generator)
- Symmetric voltage output
- Fast arc detection and suppression less than 2µs
- Remote interface: RS 485 / Profibus
- 1 x Trigger input
- 2 x Trigger output
- Fast interface for stack and synch. applications
- Burts Function for reactive sputtering
- Ext. Pulse Trigger for custom pulse input

Applications

- HiPIMS
- HiPIMS + MF
- HiPIMS + Bias
- HiPIMS Stack (up to 2000A peak)
- MF up to 75 kHz
- DC Pulse (Unipolar or Bipolar)
- Pulsed Bias

Type

- A-10 = (10 kW DC Input)
- A-20 = (20 kW DC Input)
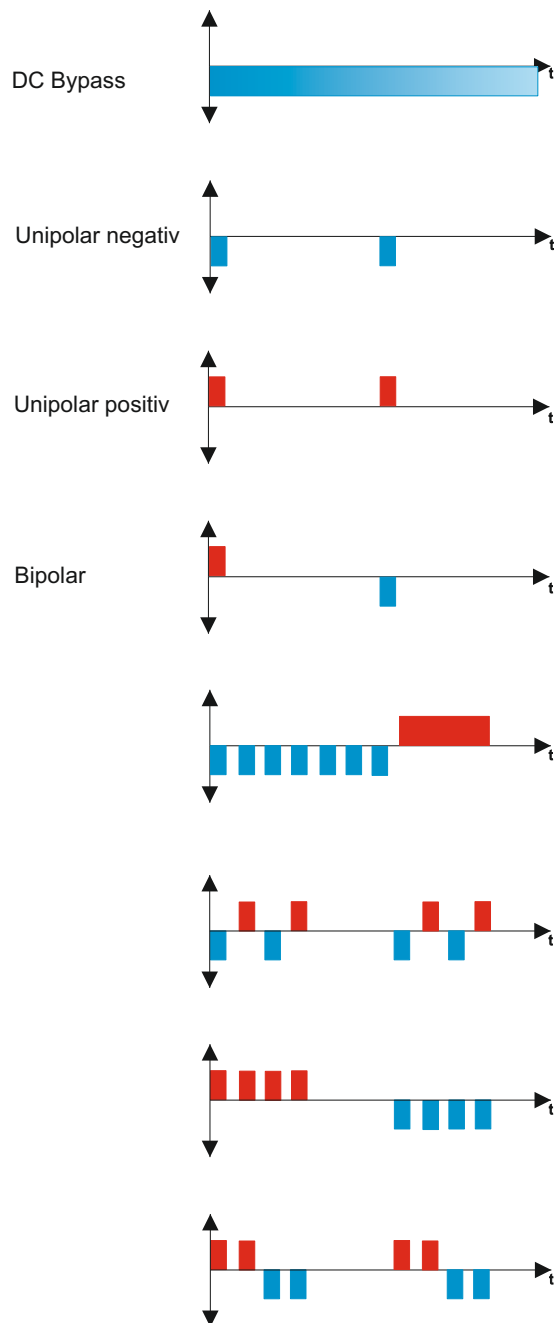- A-30 = (30 kW DC Input)

Max. DC pulsed power (kW)

- 1000 kW (peak)

Pulse

- 20Hz – 75kHz pulse frequency range @ UP Mode
- 40Hz – 40kHz pulse frequency range @ BP Mode
- Pulse on-time 5µs – 16ms
- Pulse off-time 5µs – 32ms
- DC negative mode (DC Bypass)
- Unipolar positive
- Unipolar negative
- Bipolar
- FPPG (up to 8 pulses programmable)
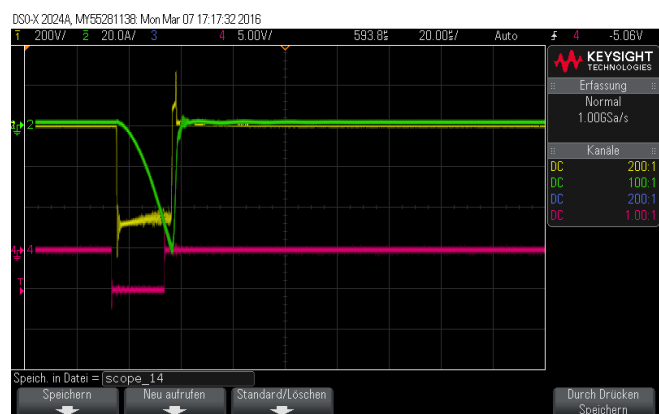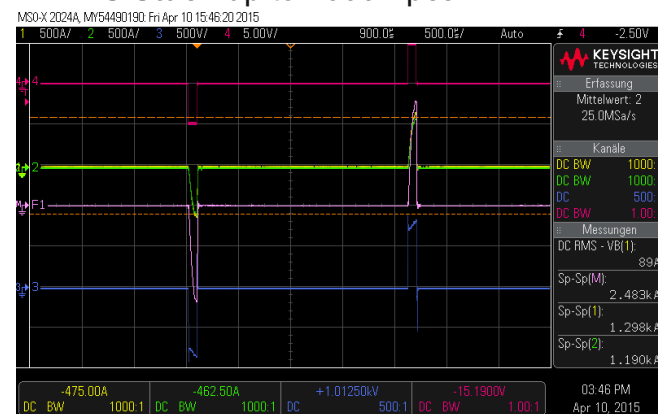- Symmetric output voltage

Output Voltage Examples

DC Bypass

Unipolar negativ

Unipolar positiv

Bipolar

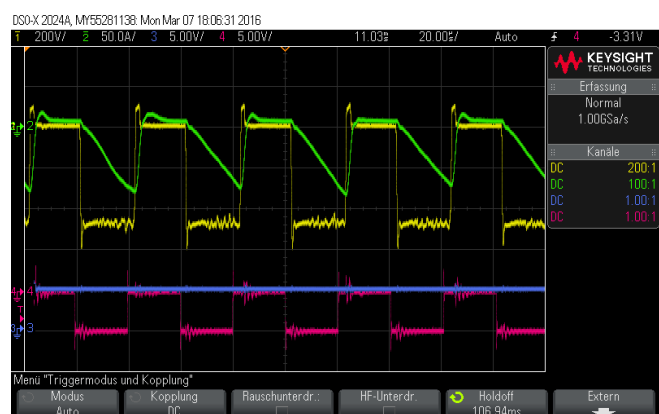# SPIK3000A Pulse Output Examples

HiPIMS

SPIK3000A / Unipolar / Single Magnetron

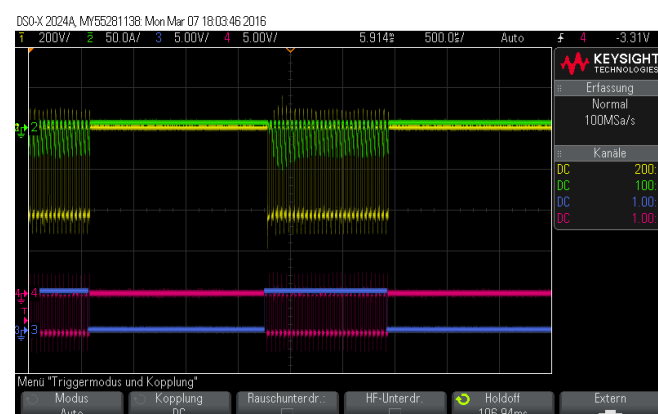## HiPIMS Stack up to 2000A peak
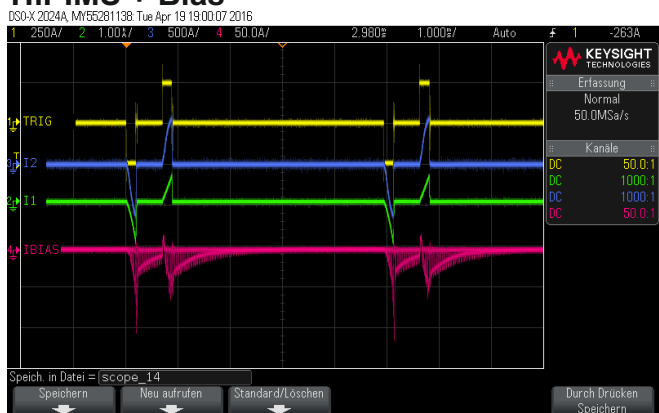

Two SPIK3000A in parallel / Dual Magnetron

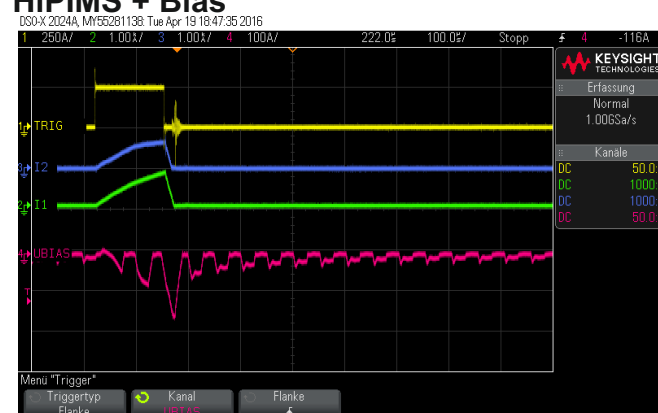## MF

SPIK3000A / Unipolar / Single Magnetron

MF Burst Function
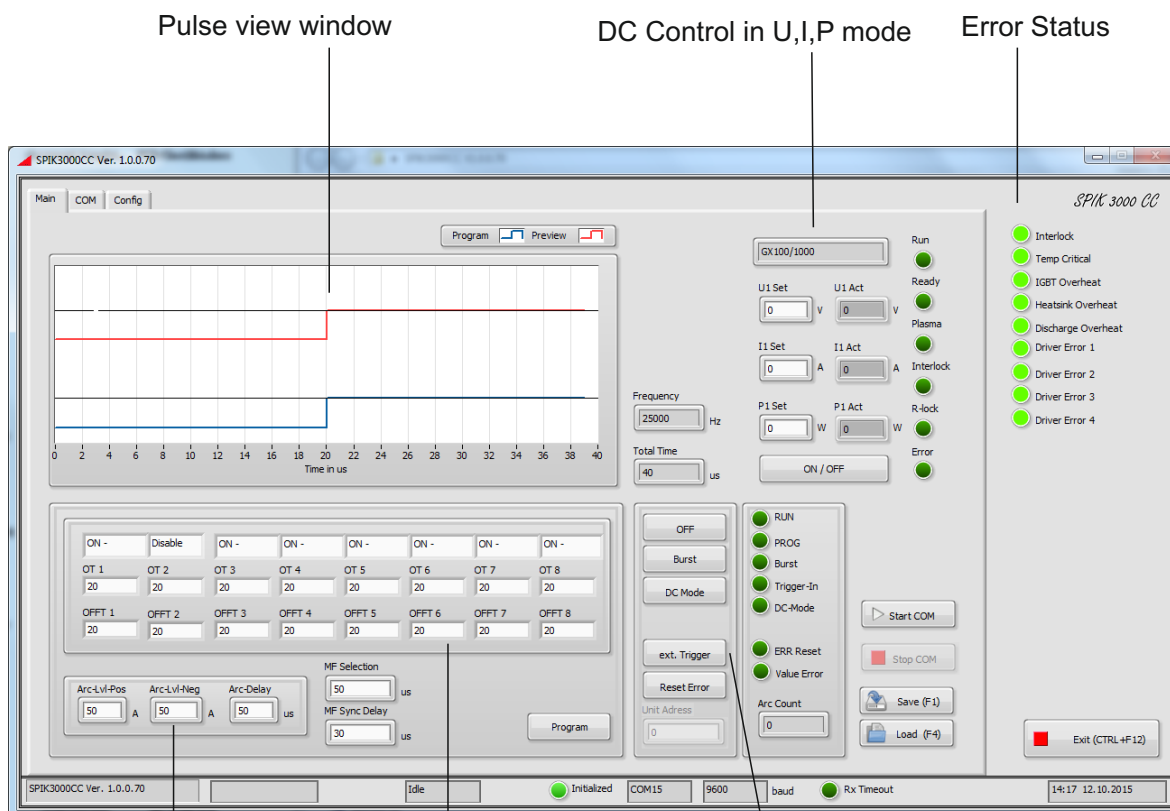

SPIK3000A / Unipolar / Single Magnetron

HiPIMS + Bias

HiPIMS + Bias

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SPIK3000 CC Software (only for RS 485 available)

Pulse view window

DC Control in U,I,P mode

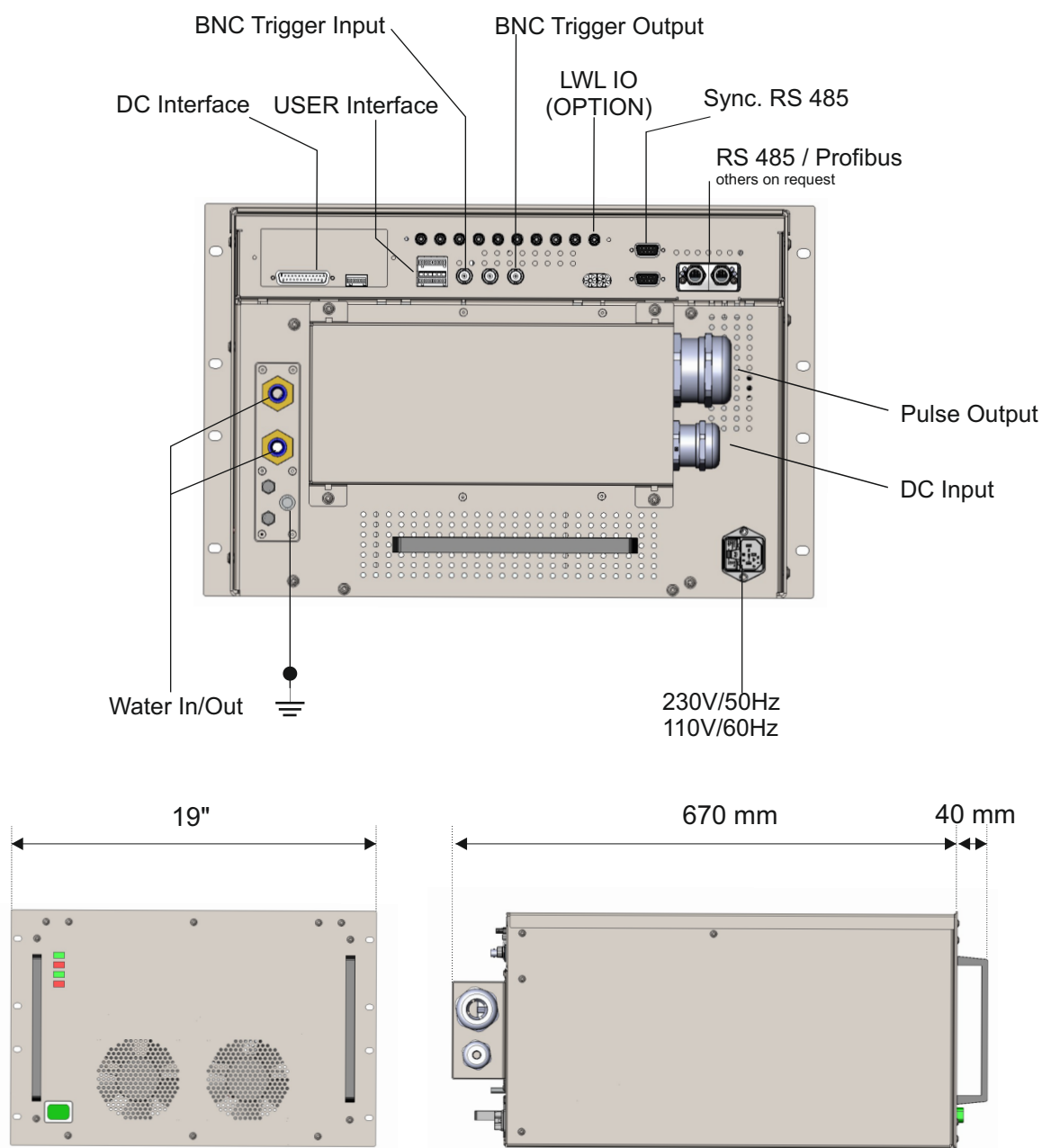Error Status

8 x pulse text fields to program polarity on & off time in µs

Arc-Current-Level:
positive, negative and delay adjustable

Mode control and status view

Interfaces and Mechanical Dimension

BNC Trigger Input

BNC Trigger Output

DC Interface   USER Interface

LWL IO
(OPTION)   Sync. RS 485

RS 485 / Profibus
others on request

Pulse Output

DC Input

Water In/Out

230V/50Hz
110V/60Hz

19"

670 mm   40 mm

MELEC GmbH
THE HIGH PULSE POWER COMPANY

For more information and applications please visit: www.melec.de

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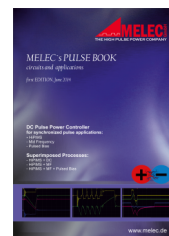
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