



# ICI-DP HH 250-15 set

## Double Pulse Magnetic Field Source

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### Short Description

The Double Pulse IC-Injection Probe (ICI-DP) is a pulse magnetic field source designed for EM fault injection in IC security applications.

The ICI-DP probe is based on the already successful Langer ICI-Injection Probe but features significantly increased injection performance, higher pulse voltage, less trigger delay as well as the new double pulse feature. For the first time, two identical interference EM pulses can be generated in very quick succession down to a two-digit nanosecond range. The probe still features a small case size together with the precision probe tip dimensions for which the ICI probes is already known.

The Langer ICI-DP probe offers the possibility for even more detailed and complex fault injection and IC security analysis.



### Technical Parameters (typ.)

Probe head dimension	Ø 250 µm
<b>Pulse parameters*:</b>	
Max. pulse voltage	1000 V
Max. coil current	16 A
Risetime, 10%-90%	2 ns
Pulswidth, 50%-50%	10 ns
Min. double pulse delay	25 ns
Polarity (software controlled)	+ / - (no polarity change within a double pulse)
Repetition frequency	0.1 Hz – 15 kHz (single pulse, < 500 V) 0.1 Hz – 7.5 kHz (double pulse, < 500 V)
Min. trigger pulse delay	35 ns
Supply	BPS 204
Additional trigger pulse delay (Delay-Line)	Controlled by BPS 204 supply
Weight	190 g
Size (L x W x H)	26 x 54 x 71 mm

\*Pulse parameters can be adapted on customer request by custom production. Adaptation is possible for narrower pulses and less double pulse delay with reduced pulse power, as well as for increased pulse power with broader pulses and increased double pulse delay.