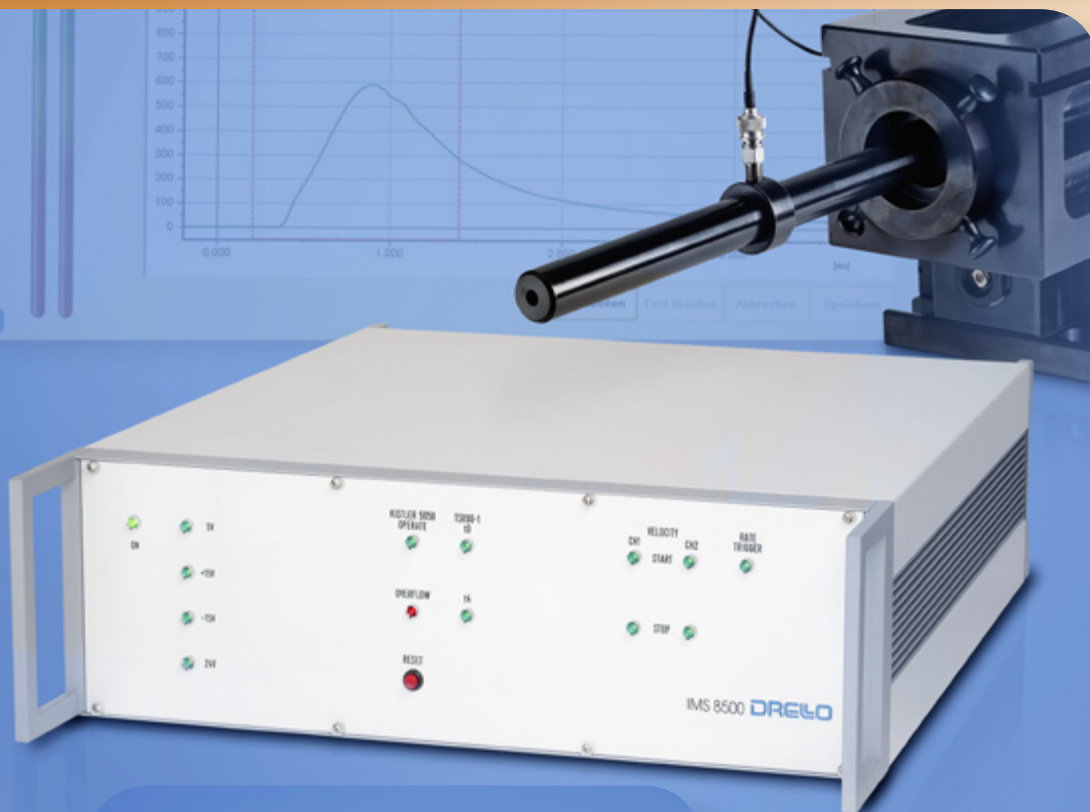
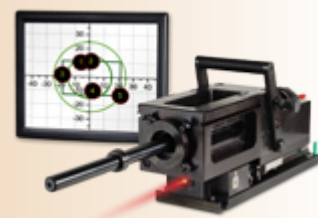


# 8500 Intelligent Measuring System



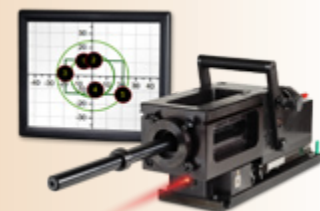
- **Measuring of external ballistic data such as velocity and rate of fire**
- **Measuring of internal ballistic data such as gas pressure**
- **Modular design with multi-channel operation**
- **Evaluation and analysis of data via PC software**

Consulting, planning, measuring and documenting  
with system solutions from

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**DRELO**  
*Ballistics*

# 8500 Intelligent Measuring System



The 8500 Intelligent Measuring system is used for measuring internal and external ballistic data.

The modular design enables easy adaptation to various requirements.

Different data measuring modules support both single and multi-channel operation.

A velocity measurement sensor (VMS) for connection of light screens, a rate of fire sensor (RMS) for connection of muzzle flash sensors, muzzle blast sensor or light screens and a transient recorder module (TRS) for measuring gas pressure curves are available as data measuring modules.

Data is recorded from the IMS 8500 Intelligent Measuring System, evaluated, analysed and documented using PC software.

Both quartz pressure pickups and copper crusher cylinders can be used as sensors for gas pressure measuring.

## Technical data

### Model

	IMS 8500-1	IMS 8500-2
<b>Electrical</b>		
Supply voltage	230 V $\pm$ 10%, 40 to 60 Hz	
Power consumption	approx. 250 mA	
RS 232	•	•
RS 485	Option	Option
<b>Environmental conditions</b>		
Operating temperature	-10 to +50 °C	
Air humidity	$\leq$ 80%, non-condensing	
<b>Velocity measurement module (VMS)</b>		
Number of channels	2	
Trigger inputs	4	
Clock rate	10 MHz	
Time resolution	100 ns	
Channel 1 measurement time, max.	429 s	
Channel 2 measurement time, max.	104 s	
Trigger impulse	+6 to +30 V	
<b>Rate of fire measurement module (RMS)</b>		
Number of channels	1	
Trigger inputs	1	
Clock rate	1 MHz	
Time resolution	1 $\mu$ s	
Measurement time, max	65 ms	
Rate of fire	1 to 10000 per minute	
Trigger impulse	+6 to +30 V	
<b>Transient recorder module (TRS)</b>		
Sampling rate (adjustable by software)	-	1 $\mu$ s to 65 ms
Resolution	-	12 bits
Memory capacity	-	32k words
Input voltage	-	0 to +10 V
"Start" impulse	-	+6 to +30 V
"Stop" impulse	-	+6 to +30 V
Pre-trigger	-	0 to 100%
<b>Dimensions, overall</b>		
Length	245 mm	490 mm
Width	350 mm	350 mm
Height	145 mm	145 mm
Weight	approx. 5 kg	approx. 10 kg
<b>for use with</b>		
Muzzle flash sensor	MFS 600	
Muzzle blast sensor	MBS 400	
Light screen	LS 11	
Light screen	LS 23	

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