



Sparklike®

SPARKLIKE LASER INTEGRATED™

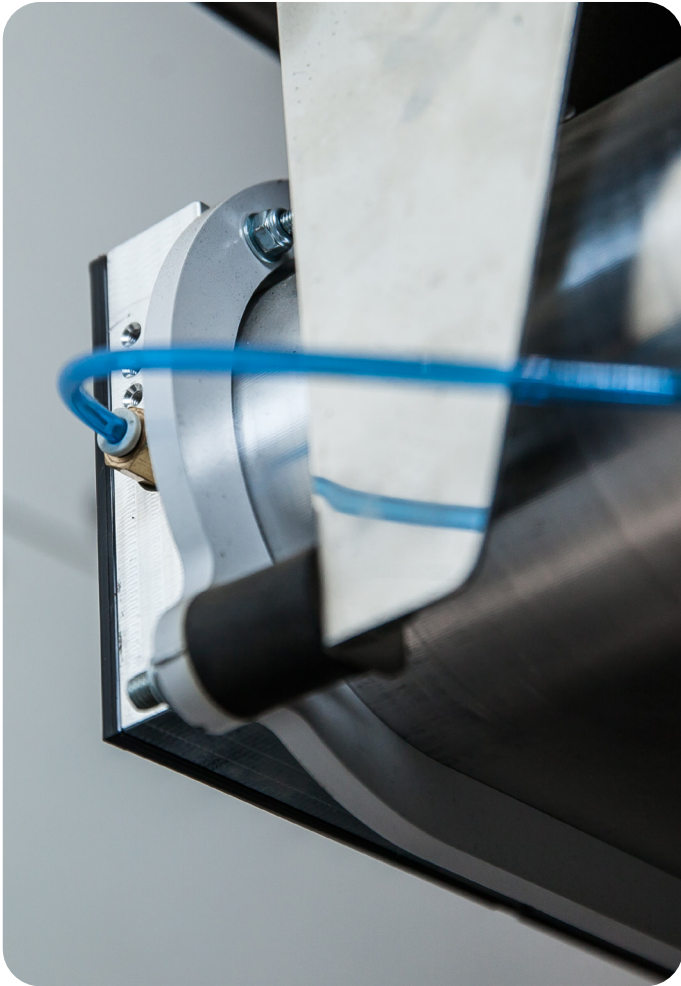
Automated Gas Measurement Station
Integrated into IG Line

Features

- Automatic gas measurement system for the IG-line
- Measures gas concentration in double and triple glazed IGUs
- Non-invasive laser-based TDLAS measurement technology
- Compatible with most coatings and laminated glass structures
- Glass, cavity, and total thickness measurement
- Coating scanner for coating position detection
- Trend monitoring with real-time gas fill visualization

Benefits

- Continuous quality control directly in the IG-line
- Reliable verification of insulating gas fill during production
- Early detection of gas filling deviations
- Consistent gas filling across different IGU sizes
- Reduced need for manual checks and sample units
- Improved process transparency and control
- Supports stable, high-volume IGU production

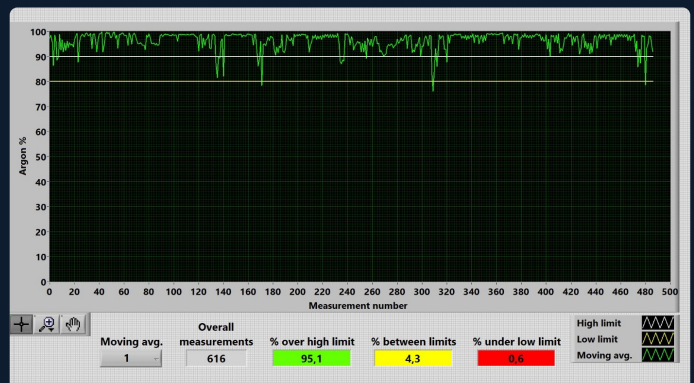
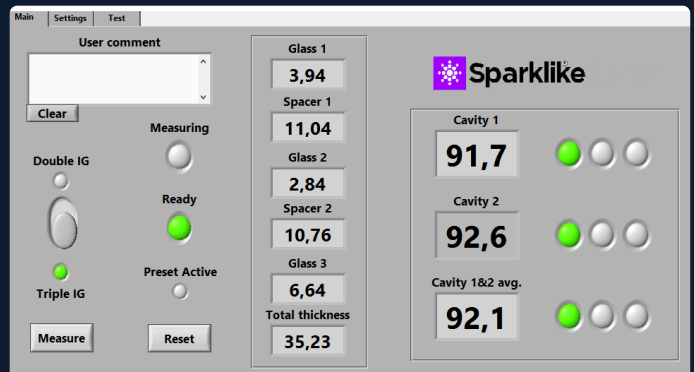


Integration & Installation

- Integration possible on most insulating glass assembly lines
- Measurement station is integrated directly into the IG-line
- Installation width: 700 mm along the IG-line
- Separate electrical cabinet
- Scalable for new or existing IG-lines
- Height up to 4m

NEW Process Monitoring Tools

- Coating scanner (optional) – detects the position of coatings within the insulating glass unit structure to support reliable gas measurement and process control
- Trend monitoring – real-time visualization of gas measurement trends with optional dual-display setup
- One display for system software
- One display for real-time trend curves



Technical specifications

Measurement range (With manual presets or information received from the IG line)	Glass thickness: 2 – 23 mm Cavity width: 4 – 40 mm
Measurement range (Without presets nor information received from the IG line)	Glass thickness: 3 – 12 mm Cavity width: 8 – 22 mm
IGU dimensions	Height: Max. 3200 mm Thickness: Max 51 mm (from surface 1 to 3 in DGU and 1 to 5 in TGU)
Thickness measurement accuracy Repeatability of the gas measurements Insulating gas filling rate	$\pm 50 \mu\text{m}^*$ $\pm 2 \%^* \quad **$ 1...97 % Argon
Device details	Footprint: 700 x 1300 mm Height: Max. 4340 mm Weight: Approx. 350 kg
Operating Conditions	Temperature: 10-40°C Humidity: 20-80%
Main Power Supply Connected Power Connectors	110–120 / 220–240 VAC 50/60 Hz, PE 1600W Ethernet, USB 2.0, VAC Power, Argon supply with 6mm tube
Software	Custom made Sparklike Laser Integrated™ SW running on Windows 10 LTSP platform

* Typical construction of the insulating glass unit

** At least 30 measurements are needed that 95 % confidence interval is valid
Calibration interval for the specified repeatability is max. 12 months.

IGU stop time ranges and dimensions

IGU stop time ranges for the measuring process (Depending on needed Z and Y movement)	IGU dimensions received from the IG line	IGU dimensions not received from the IG line
DGU	9 – 22 s	25 – 38 s
TGU s	13 – 26 s	31 - 44 s

Sparklike Laser Integrated™ provides fast, automated, and non-destructive inline gas measurement in a simplified and cost-efficient design helping insulating glass manufacturers improve quality, optimize production, and control costs.

**Scan the QR-code to visit
Sparklike website**

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