



Sparklike®

# SPARKLIKE LASER INTEGRATED™

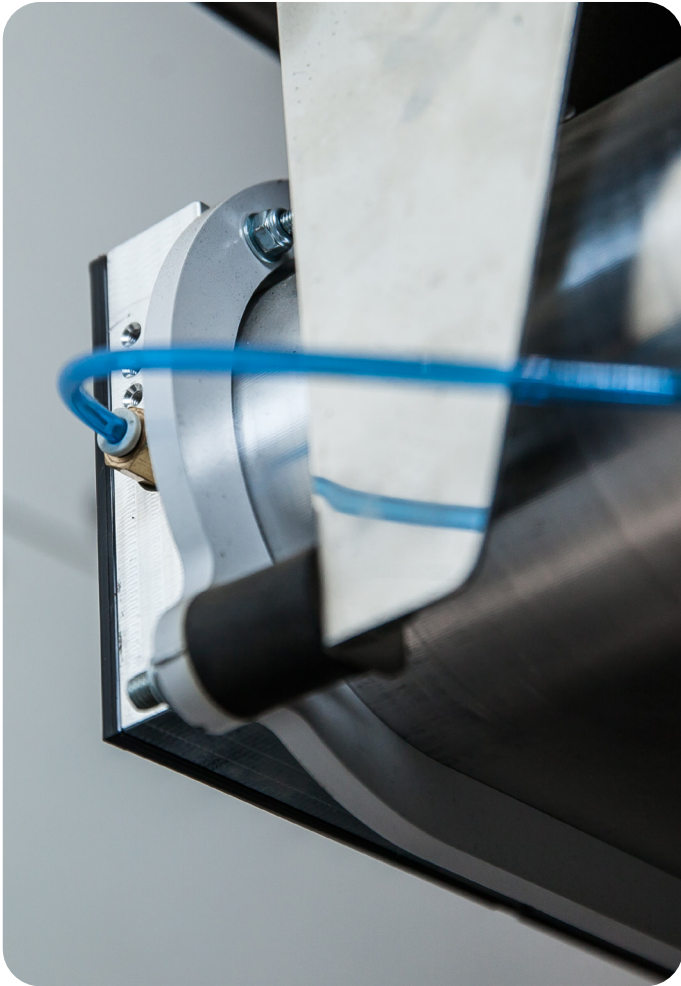
Automated Gas Measurement Station  
Integrated into IG Line

## 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

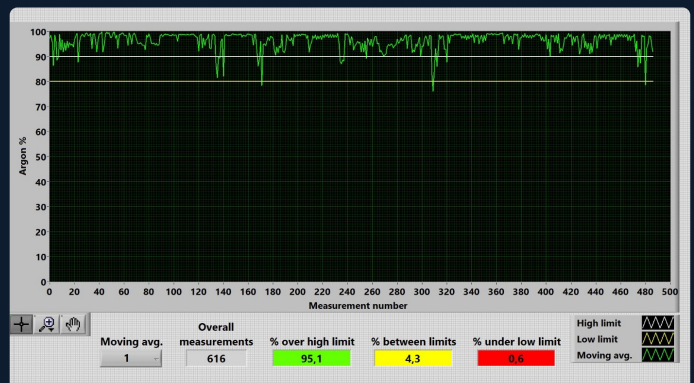
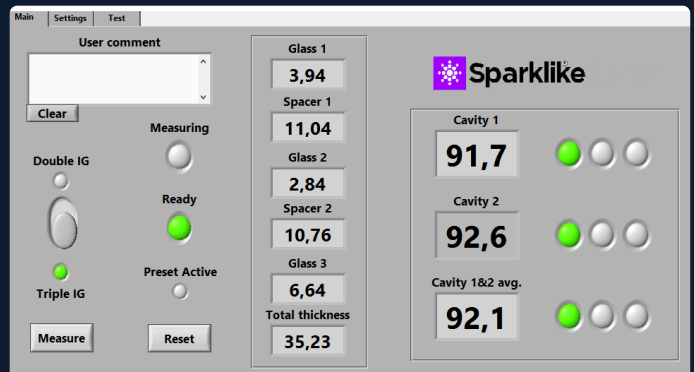


## Integration & Installation

- 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

<b>Measurement range</b> (With manual presets or information received from the IG line)	Glass thickness: 2 – 23 mm Cavity width: 4 – 40 mm
<b>Measurement range</b> (Without presets nor information received from the IG line)	Glass thickness: 3 – 12 mm Cavity width: 8 – 22 mm
<b>IGU dimensions</b>	Height: Max. 3200 mm Thickness: Max 51 mm (from surface 1 to 3 in DGU and 1 to 5 in TGU)
<b>Thickness measurement accuracy</b> <b>Repeatability of the gas measurements</b> <b>Insulating gas filling rate</b>	± 50 µm * ± 2 % * ** 1...95 % Argon
<b>Device details</b>	Footprint: 700 x 1300 mm Height: Max. 4340 mm Weight: Approx. 350 kg
<b>Operating Conditions</b>	Temperature: 10-40°C Humidity: 20-80%
<b>Main Power Supply</b> <b>Connected Power</b> <b>Connectors</b>	110–120 / 220–240 VAC 50/60 Hz, PE 1600W Ethernet, USB 2.0, VAC Power, Argon supply with 6mm tube
<b>Software</b>	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**

[sparklike.com/en/product/  
sparklike-laser-integrated](https://sparklike.com/en/product/sparklike-laser-integrated)



**CONTACT US**

[sales@sparklike.com](mailto:sales@sparklike.com)  
Sparklike Oy, Helsinki, Finland

**CONTACT YOUR LOCAL DISTRIBUTOR**

[Sparklike.com/en/contact-us](https://sparklike.com/en/contact-us)