

A disruptive step in Gap & Flush measurement technology

Gap & Flush is a **key factor** of the assembly process in many industrial sectors both for aesthetic and functional purposes.

G3F comes as an ergonomic, smart and non-contact wireless laser line triangulation sensor for the operator performing assembly and quality control operations.

The unrivalled ergonomics and the smart features of G3F allow operators to reliably perform **in-line Gap & Flush quality control** while being fully integrated with the digital factory.

Application sectors:

- **Automotive**
- **Household appliances**
- **Aeronautics**
- **Wood Furniture**



G3F features

Portable and ultra-ergonomic design

Small and lightweight, it can easily fit in your pocket

Fast measurements

Less than **1 s** for a single measurement

One laser, multiple surfaces

The 405 nm laser makes it possible to efficiently measure on different surfaces, including transparent and reflective materials

Eye safety

G3F ensures operator safety, conditionally switching on/off the laser beam

AI Engine

G3F runs patented AI algorithms for manual measurement uncertainty management



Gap & Flush assessment on multi-configuration parts and geometries



Compensation of operator inaccuracy



Conditional switch on/off of laser source (operator eye safety)



Feedback to the operator with respect to measurement uncertainty



Target recognition for optimized image acquisition and processing

G3F specifications

Laser	405 nm
Working range X (lateral)	20 mm @ 12 mm
Working range Z (axial)	0 to 12 mm
Uncertainty X (Gap)	< 25 µm
Uncertainty Z (Flush)	< 20 µm
Measurement time	< 1 s
Display	1" integrated display
Dimensions	45 x 45 x 120 mm
Weight	300 g
Battery life	~ 8 h



About our Company

U-Sense.IT is an innovative start-up, spin-off of the Polytechnic University of Marche, Italy, targeting the specific market of non-contact instrumentation for in-line quality control.

Vision: to provide SMART measurement systems to empower operators in the Digitally Connected World.

U-Sense.IT holds a unique position in the optoelectronic sensor market, being the first manufacturer to implement Artificial Intelligence on portable laser scanners targeted to gap and flush measurements and to bidirectionally connect operators to the digital factory network.

Look for us

A dynamic, motivated and qualified team

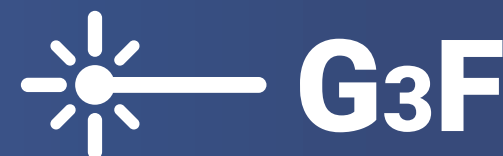


U-SENSE.IT

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Portable, wireless
and smart
IIoT laser line
triangulation
sensor for
Gap & Flush
measurement



SMART

ERGONOMIC

IIoT

U-Sense.IT

MEASUREMENT SYSTEMS
FOR DIGITAL FACTORIES