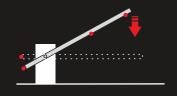


GATE SAFETY BECOMES SMART

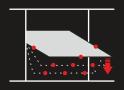


FORCE MEASUREMENT INSTRUMENTS
FOR (COMPLIANT AUTOMATIC GATES AND DOORS
EN12445 EN12453 EN16005 EN60335-2-95 DHF TS 011























From the experience of Microtronics in the sector of instrumentation for automatic gates/doors comes the evolution of BlueForce: the new **BlueForce Smart**, equipped with the most advanced wireless Bluetooth technologies LE 4.1 and NFC Forum Type 4, is designed to interface with the latest smartphones generation to share the functions of the Internet.

The same strength and precision as ever, together with a highly unique design, lie at the base of the success of BlueForce, adopted throughout Europe as a Reference Instrument by the major Notified Bodies and the top manufacturers of automations for poweroperated gates and pedestrian doors.

INNOVATIONS AND MAIN FEATURES



Bluetooth LE 4.1 technology: wireless BLE connectivity represents the evolution of Bluetooth technology, and enables interfacing of the BlueForce with a PC (Windows OS with BlueForce software) via the USB-plug receiver (optional), compatible also with the latest smartphones* generation.

NFC technology: thanks to the NFC technology, place the smartphone** on the back of the new BlueForce to read the force test directly on the mobile phone, according to the specific type of gate/door, illustrating all measurement points as envisaged by current standards.



USB port: enables connection of the instrument to a Windows OS PC to download and manage performed tests. The latest Microtronics BlueForce software enables the tests storage with date and time of execution, combining these with the specific measurement point, and analysing trend graphs with the generation of a report to attach to the Technical Specifications. Now, it is also possible to update the instrument Firmware via USB.

FTP Thermal Printer (optional): Compact, high-speed thermal printer with long-life rechargeable lithium battery, compact and easily transported in the device carry case, for use in situ. Wireless-Bluetooth transmission allows quick data sending of the tests performed via the BlueForce Smart (or Upgrade) device.



Optional measurement accessories: the practical Straight Extension, suitable for all types of gates and doors, is hooked up to the instrument to measure force at distances of 30 and 50 cm from the striking point. The Angular Extension, linked to the Straight Extension, is specially designed to measure force at distances of 1.25 and 2.5 metres in vertically closing gates/doors.

New KIT Smart: A sturdy generously sized carry case with a unique design to hold together the instrument and its useful accessories: the Straight Extension (to perform measurements at 30 cm and 50 cm from the striking point) and the FTP Thermal Printer.





Made in Italy



Technical data:

- Dimensions and Weight: 280x80x50mm approx.
- Power supply: 9V alkaline battery
- Memory capacity: 80 tests
 Force acq. interval: 6 sec, sampling at 1kHz
- Force measurement range: 0-2000N (mechanical stop at approx. 2100N)
- Force measurement resolution: 1N
- Dynamic time measurement resolution: 0.01s
- Maximum force measurement error margin: range from 25N to 400N: $\pm 0.5\%$ F.S.; from 400N to 1000N: $\pm 1\%$ F.S.; from 1000N to 2000N: $\pm 2\%$ F.S.
- CE-EMC conformity at TUV Rheinland on sample BlueForce instrument serial no.: 00981
- Compliant with standards: EN12453, EN12445, EN16005, EN60335-2-95, DHF TS 011-012, ASR A1.7
- NFC interface: standard ISO/IEC 14443 and NFC
- BLE interface: Bluetooth version 4.1
- USB interface: v.2.0 specification compliant
- (*) Compatible with Android devices with S.O. from 5.0 and with Apple devices with iOS from 9.0
- (**) Compatible with all smartphones equipped with an active NFC interface. And active Internet connection is required.