microtronics®
Professional Instruments

BLUEFORCE
SMART PRO



BLUEFORCE CLOUD

Technical Data

THANK YOU! For choosing a Microtronics product

BlueForce Smart Pro is an instrument for the measurement of crushing forces on automatic doors and motorised gates.

It is mandatory to follow the instructions for use and maintenance set out in this manual

Use is reserved to qualified personnel only

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Technical Data

Dimensions and weight: 280x80x50mm - approx. 1.6Kg

Power supply: non-removable Li-ion battery 650mAh – rechargeable via USB 5Vdc 500mA

Local storage capacity: 80 tests

Force acquisition interval: 6 sec, sampling 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: range from 25 to 400N: ±0.5% F.S.; from 400N to 1000N: ±1% F.S.; from 1000N to 2000N: ±2% F.S.

Complies with standards: EN12453, EN16005, EN60335-2-95, DHF TS 013, ASR A1.7

Satellite receiver : GPS/GLONASS

Quad band GSM/GPRS modem radio interface: GSM850MHz, EGSM900MHz, DCS1800MHz, PCS1900MHz

Bluetooth radio interface: v. 3.0

USB Interface: v.2.0 specification compliant

Cloud area access (always included): visualization of measurements and graphs on mobile devices

Cloud area access (included for the first year): compilation of documentation for the compliance and Technical File

Instrument Maintenance

If possible, always store the instrument in its suitcase.

- In case of intensive use, clean the instrument with a slightly damp cloth.
- Do not unscrew the screws on the side and on the knocker, as they are locked internally.
- Do not remove the battery. Improper removal may result in personal injury and damage to the instrument.
- Do not remove the internally installed data SIM card.

Every year the instrument needs a general check and calibration (mandatory). Contact your dealer or book the calibration service on the Microtronics website.

Warranty Conditions

The hardware of the products is guaranteed for 24 months from the date of delivery of the product, during which time any part found to be defective will be replaced or repaired free of charge. Products in need of repair must be returned to Microtronics or to a Microtronics authorised service company only after approval.

The above warranty does not cover:

- Any minor aesthetic imperfections intrinsic to the particular manufacturing process
- Normal use of the instrument
- Faults due to tampering or attempted repair by personnel not authorised by Microtronics
- Faults due to neglect, poor maintenance, or incorrect use of the instrument.
- Possible bugs (imperfections) in the software and/or incompatibility with PCs or external peripheral devices.
- Damage caused by transporting the instrument.

Liability

N.B.: The indication of PASSED / FAILED measurement provided by the instrument and/or the software depends on the type of door and on the behaviour of the operator. Microtronics Srl cannot be held liable in any way for any damage to persons and/or things resulting from the incorrect interpretation of the measurements and from the behaviour of the operator.

DICHIARAZIONE DI CONFORMITA' CE

CE

■ **IL PRODUTTORE**

Microtronics S.r.l.
Via Schiavonia, n° 93 - 31032 Casale sul Sile - Treviso (Italy)

■ **DICHIARA DI SEGUITO CHE IL PRODOTTO:**

Tipo: Strumento misuratore di forze d'impatto per chiusure elettriche
Modello: BlueForce Smart art. 50V001G (e varianti con personalizzazioni)

■ **RISULTA IN CONFORMITA' A QUANTO PREVISTO DALLE SEGUENTI DIRETTIVE COMUNITARIE:**
(Comprese tutte le modifiche applicabili)

DIRETTIVA EMC: 2014/30/UE
DIRETTIVA R&TTE: 2014/53/UE
DIRETTIVA RoHS II: 2011/65/CE

■ **INOLTRE DICHIARA CHE SONO STATE APPLICATE LE SEGUENTI NORME TECNICHE:**
(Comprese tutte le modifiche applicabili)

EN 60950-1:2007 + A11:2009 + A1:2010 + A12:2011 + A2:2013 Apparecchiature per la tecnologia dell'informazione - Sicurezza
EN 62311:2008 Emissioni elettromagnetiche - Sicurezza (Art. 3.1a)
EN 62479:2010 Emissioni elettromagnetiche - Sicurezza - Valutazione
EN 55022:2010: Apparecchiature per la tecnologia dell'informazione - Caratterizzazione disturbi radio
EN 55024:2013: Apparecchiature per la tecnologia dell'informazione - Caratteristiche di immunità
EN 301 511 V12.5.1, EN 300 328 V2.1.1, EN 303 413 V1.1.1 Compatibilità Elettromagnetica e spettro delle radiazioni elettromagnetiche (Art. 3.2)
EN 301 489-1 V2.2.0, EN 301 489-17 v3.2.0, EN 301 489-19 V2.1.0, EN 301 489-52 V1.1.0 Compatibilità Elettromagnetica e spettro delle radiazioni elettromagnetiche (Art. 3.1b)
EN 61000-4-2/3/4/6: EMC immunità ai disturbi: metodi di prova
EN 61000-6-1/3: EMC emissioni: metodi di misura

LUOGO: Casale sul Sile (TV) **DATA:** 4 aprile 2022

NOME DELLA PERSONA INCARICATA: **Ing. Fabrizio Montagner**

FIRMA: .....

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Improper Use of the Instrument

Microtronics will NOT be liable for lost profits, direct or indirect incidental or consequential damages, or any other damages of economic nature, even if Microtronics or any reseller knew of the possibility of such damages. The law of some countries does not allow the exclusion or limitation of liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you.



WEEE - Waste of electric and electronic equipment

In the European Union, this label indicates that this product must not be disposed of with household waste. It must be deposited in an appropriate facility capable of carrying out recovery and recycling operations.

Risks associated with the use of radio equipment



Pay attention while driving



Enable the airplane mode in your mobile phone or switch it off



Attention: wireless devices may cause interference



In case of urgency use the emergency call



Attention: possible interference near electric equipment



In areas with potentially explosive atmosphere, turn off wireless devices.

BLUEFORCE

SMART PRO

...designed and developed
around the needs of installers...

microtronics®
Professional Instruments

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Made in Italy

All Microtronics design and manufacturing takes place in Italy