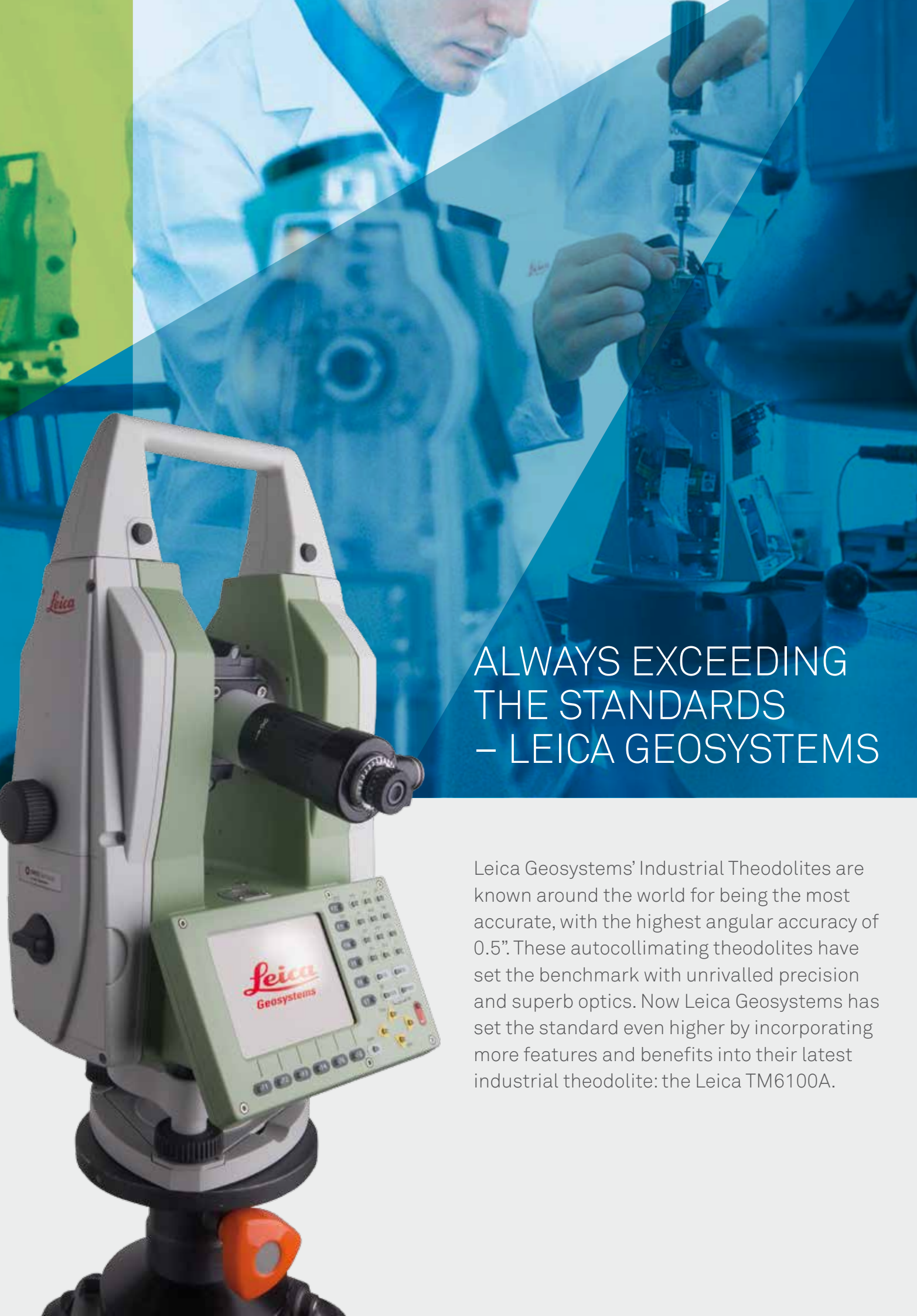HEXAGON
METROLOGY

LEICA INDUSTRIAL THEODOLITE
Leica TM6100A

ALWAYS EXCEEDING THE STANDARDS
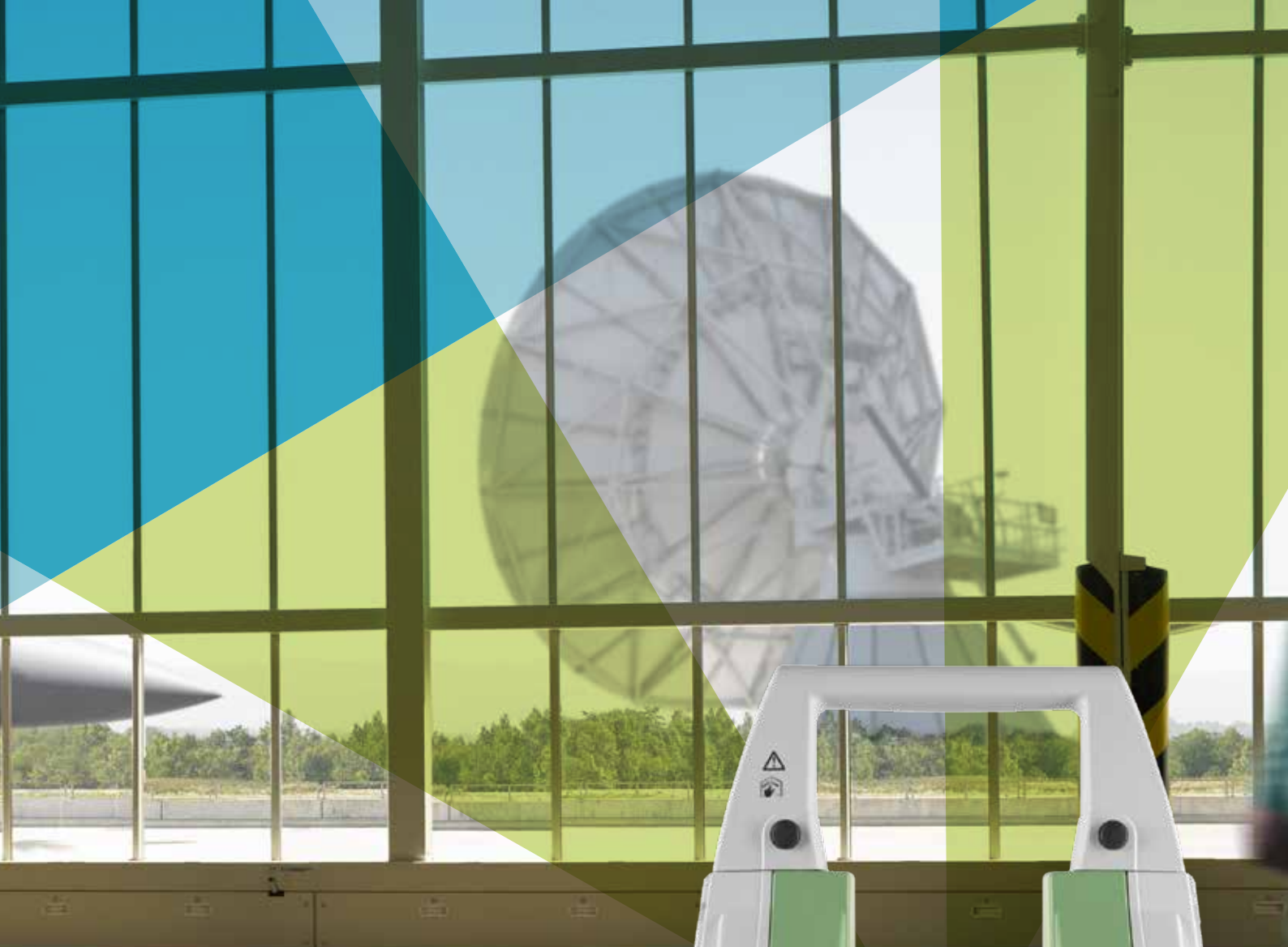# – LEICA GEOSYSTEMS

Leica Geosystems' Industrial Theodolites are known around the world for being the most accurate, with the highest angular accuracy of 0.5". These autocollimating theodolites have set the benchmark with unrivalled precision and superb optics. Now Leica Geosystems has set the standard even higher by incorporating more features and benefits into their latest industrial theodolite: the Leica TM6100A.

Engineered with leading edge technology

Leica Geosystems has redesigned the direct drive technology for the Leica TM6100A, using the same Piezo technology that is used in the Leica TDRA6000 and the Leica Absolute Tracker AT402. These direct drives offer the stability of manual drives, the flexibility of fully automated motorized drives and still allow for sub micron level fine positioning. The fine adjustment knobs on the Leica TM6100A have been strategically repositioned to help make measuring in difficult situations easier and because there are no gears with this new technology, the direct drives require almost no maintenance and are nearly silent. Not only does the Leica TM6100A have a newly designed battery concept, but since the Piezo direct drive technology requires low power consumption, the battery lasts longer. Users can work more than a full day without having to charge or change the battery.

Designed with the operator in mind

Leica Geosystems has added features to the screen and interface of the Leica TM6100A. The color touch screen remains clearly visible at all times, allowing operators to take the theodolite to any location. The intuitive user interface allows users to have minimal training before doing basic measurements and calibrations to the sensor. The interface offers function keys that can be set for specific procedures, six of the 12 function keys are already pre-set with the most commonly used procedures. Leica Geosystems continues to take industrial measurement to new levels with the Leica TM6100A.

Technical specifications Leica TM6100A

Accuracy

Std. Dev. Hz, V, ISO 17123-3	0.15 mgon (0.5")
Display least count	0.01 mgon (0.01")

Focussing distance
(Shortest focussing distance)

from telescope front lens	0.51 m
from telescope tilting axis	0.60 m

Telescope

Type	Panfocal alignment telescope
Image	Erect
Objective aperture	52 mm
Clear objective diameter	40 mm
Focusing	Coarse and fine

Telescope tilt

pointing direction down	−55° (−60 gon)
pointing direction up	+47° (+52 gon)

Compensator

Setting Accuracy	0.15 mgon (0.5")
Setting range	0.07 gon (4")

Special features

Built-in autocollimation device (green negative crosshair)

Illumination	AL51 plug-in lamp keyboard switch

Field of view and magnification

Focussing distance	0.6 m	3 m	10 m	100 m	∞
Field of view	0.04 m	0.11 m	0.26 m	2.08 m	1°08'

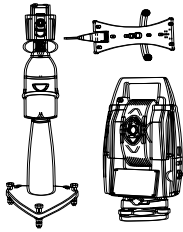| Magnification					
Standard Eyepiece	13x	24x	32x	41x	43x
Eyepiece FOK53	18x	33x	44x	56x	59x

Autocollimation

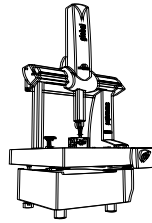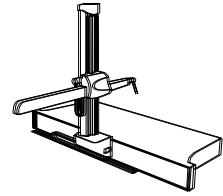*Extended battery life*

Piezo technology

LASER TRACKERS
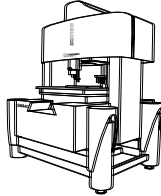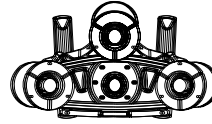& STATIONS

PORTABLE MEASURING ARMS
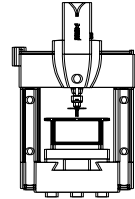
BRIDGE CMMS

HORIZONTAL ARM CMMS

GANTRY CMMS
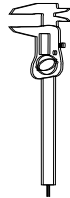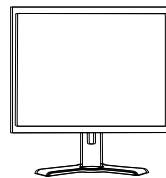
MULTISENSOR & OPTICAL SYSTEMS

WHITE LIGHT SCANNERS

ULTRA HIGH ACCURACY CMMS

SENSORS

PRECISION MEASURING
INSTRUMENTS

SOFTWARE SOLUTIONS

HEXAGON
METROLOGY

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