

ABSOLUTE ARM 7-AXIS WITH RS6 LASER SCANNER

KEY FEATURES

SHINE TECHNOLOGY

Systematic High-Intelligence Noise Elimination (SHINE) technology allows the RS6 to scan any surface, whatever the finish or material and deliver full performance at all times – maximum frame rate with maximum laser width for maximum productivity

SPINGRIP AND SPINKNOB

ergonomic infinite-rotation handling grips minimise operator fatigue, ensure thermal stability and maximise accuracy

ABSOLUTE ENCODERS

exclusive to Absolute Arm, no referencing needed: power-on and measure

INFINITE ROTATION

on major axes

ADVANCED MATERIALS

high-end carbon-fibre construction ensures thermal stability

ARM ARCHITECTURE

uneven tube lengths (typical in industrial robot design) make the arm lighter to use

HOMEDOCK

secures the wrist with probe/sensor in a safe position

OLED WRIST DISPLAY

instant access to settings and monitoring

ERGONOMICS

wrist design with intelligent button positioning allows total control during measurement, including removable handle and 3 pistol-grip sizes

RS6 LASER SCANNER

fully certified, extra-wide blue laser line, up to 300Hz scan-rate with 1.2 million points/sec, with SHINE technology ensuring high quality data on any surface at full speed with default settings, repeatable mounting, no recalibration needed

ZERO-G COUNTERBALANCE

minimises torque in the arm's base, giving effortless movement

AUTOMATIC PROBE AND SENSOR RECOGNITION

change touch-probes or mount laser sensors on the fly without any recalibration

SMARTLOCK

safely locks the arm when at rest, or conveniently locks it at any intermediate angle while measuring

INTERCHANGEABLE CONTROL PACKS

boost functionality of all arms with laser scanning, WiFi connection and full battery-powered operation

EMBEDDED LED PICTOGRAMS

for visual feedback of arm's functions and status

ROBUST FEEDBACK

instant visual, acoustic and haptic feedback

MOUNTING OPTIONS

selection of magnetic or vacuum bases, tripods and stands



MEASUREMENT VOLUME

available as 2 m, 2.5 m, 3 m, 3.5 m, 4 m and 4.5 m

VOLUME EXTENSION

Leap Frog Kit or GridLOK system allows large-volume extension



3 ACCURACY LEVELS

83, 85 and 87 series



24-MONTH WARRANTY

on all Absolute Arm systems



ISO PROBING ACCURACY

certification to ISO 10360-12 as standard

SCANNING SYSTEM ACCURACY

total system (arm and scanner) specification to ISO 10360-8 Annex D



VERIFICATION ARTEFACTS

supplied with each arm, allow users to verify system performance according to certification



SERVICE CENTRES

an extensive network of Hexagon Service Centres means quality service and support is always nearby



RDS SMART

proprietary software featuring Self-Monitoring Analysis and Reporting Technology (SMART) that manages the arm in the field by monitoring diagnostics including shocks and temperature

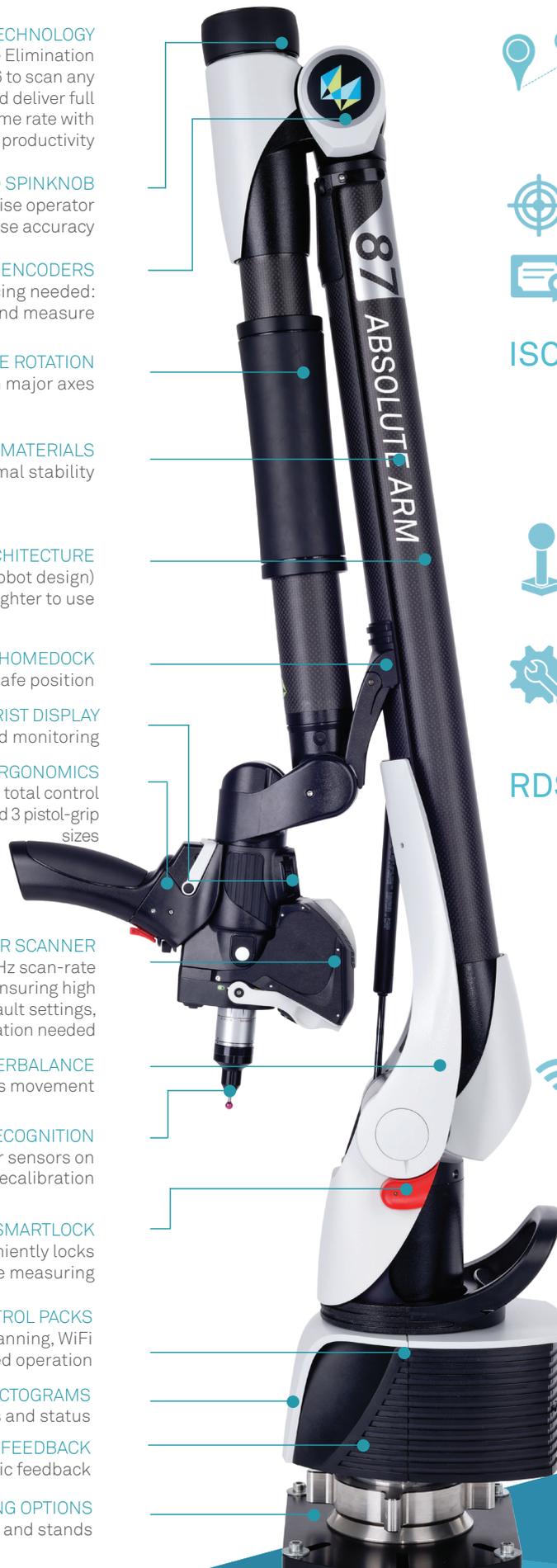
QUICK MEASURE

built-in utility program allows basic measurements without additional software



BUILT-IN Bluetooth®

allows connection to several accessories (earphones, temperature sensors, etc.)



CRITERIA FOR CHOOSING ABSOLUTE ARM 7-AXIS	Hexagon	(other)
Availability of various system sizes and accuracy levels?	YES 6 sizes, 3 levels	
Availability of extended-volume measurement options (i.e. up to 5-10 times the system's standard volumetric range)?	YES Leap Frog Kit/GridLOK	
Probing accuracy specifications according to ISO 10360-12 (certification included)?	YES	
Compliance with impact, shock vibration, emissions and environmental norms (CE, IEC, etc.)?	YES (full list in manual)	
Does the system include artefacts and software so you can verify its accuracy performance compared to the specifications (software scripts/guides)?	YES	
Does the system include software for diagnostics and performance monitoring?	YES	
Is the system thermally stable (i.e. high-end carbon-fibre construction)?	YES	
Can the system measure immediately after power-on (no warm-up time)?	YES	
Does the system feature Absolute Encoders (with no need to be reset or 'zeroed' before measurement)?	YES	
Does the system's counterbalance mechanism allow the arm to be used comfortably and with a single hand (with an ergonomically designed wrist)?	YES	
Does the arm allow infinite rotation on major axes?	YES	
Does the system provide the operator with suitable feedback in any shop-floor environment (audio, visual and haptic warnings)?	YES	
Are multiple hand-grip sizes offered (small, medium, large) as standard?	YES	
Can the operator use the arm as a mouse (for remote computer control)?	YES	
Does the system have a built-in display providing the operator with instant feedback on the arm status and the measurements taken?	YES	
Does the arm include a safety locking mechanism when at the home-position to prevent accidental tilt?	YES	
Is the arm able to lock at least one axis at a desired angle for measurements in low-ceiling or confined areas?	YES	
Does the system have options for ergonomically positioned handling grips?	YES (SpinGrip/SpinKnob)	
Is complete Scanning System Accuracy (arm and scanner) certified according to ISO 10360-8 Annex D (certifications included)?	YES	
Can you remove the hand-grip for easier laser scanning inside tight spaces or cavities?	YES	
Can you remove the laser scanner for easier probing inside tight spaces or cavities?	YES	
Does the system offer both automatic and manual laser scanner exposure adjustment for scanning surfaces of different colours and reflectivity but without affecting the frame rate or laser line width?	YES	
Is wireless measurement available for probing?	YES	
Is battery operation available (with hot-swappable batteries)?	YES	
Does the system feature built-in Bluetooth® that allows connection to several accessories (earphones, temperature sensors, etc.)?	YES	
Can the system accept the mounting of an external laser scanner?	YES	
Can probes or scanners be mounted and used without stopping to calibrate or select the probe in the software?	YES	
Can you easily swap probes without extra tools?	YES	
Are other probe types (extended or 'hooked' probes) available, in case you need to add more measurement capabilities later?	YES	
Is there a variety of mounting options (magnetic, tripod, vacuum base)?	YES	
Is a dust cover for the arm included?	YES	
Does the system come with a single carrying case with wheels for mobility?	YES	
Is a 24-month warranty offered as standard with all systems?	YES	