

ROMER Absolute Arm Maximum Performance Portable Measurement



ABSOLUTELY GROUNDBREAKING

ROMER portable measuring arms move dimensional inspection to the point of production. For workpieces that are large, difficult or impossible to move, take the CMM to the part, instead of taking the part to the CMM. The ability to quickly measure ensures quality, process control, reduces scrap and eliminates rework.

With twenty years of development in portable arm technology, ROMER draws its inspiration from the entire Hexagon Metrology product family. The Absolute Arm leads the industry with innovative, lightweight systems designed to make portable metrology fast, easy and affordable.

Absolute Return on Investment

Discover dramatic results with the ROMER Absolute Arm. Measure your ROI with:

- Faster inspections
- · Elimination of costly and inflexible dedicated fixtures
- Minimized production wait times
- Scrap and rework reductions
- Elimination of manual data entry

Typical industries which have benefited from the Absolute Arm include: automotive, aerospace, heavy equipment manufacturers, machinery manufacturers, and energy equipment manufacturers among others.



ROMER TECHNOLOGY

Absolute Encoders

Proprietary absolute encoders in the arm's primary axes always "know" the position of the joints. The result is an arm which does not require complex homing procedures before measuring. When the arm is turned on, it's ready to go.

Lighter, Stiffer, More Accurate

From the carbon fiber tubes to the simplified dual yoke joint housings, the Absolute Arm is the lightest arm we've ever built. The 2.5 meter arm weighs just 17 pounds, fifteen percent lighter than similar length arms. Recent upgrades make it the most accurate arm we've made.

Longer

Oversized parts aren't a problem with the 4 and 4.5 meter length arms. Currently the longest in the industry, these two options expand your measuring envelope. Need to expand it further? Ask us about our patented GridLOK system which turns your Absolute Arm into a giant CMM.

Feature Pack Flexibility

- FP1 Scanning Pack: Allows connection of laser scanning systems.
- FP2 Mobility Pack: Rechargeable hot swappable batteries and WiFi transmitter allow completely wireless use of the Absolute Arm.
- FP3 feature pack allows wireless scanning for the RS2 integrated laser scanner. Scan up to 50,000 points per second.
- "No Pack" Option: The Absolute Arm is completely functional without a feature pack, using a 110/220v power connection.

RDS Communication

The new RDS arm communication and diagnostics software runs in the Windows notification area and is instantly available. Intuitive program operation facilitates probe calibration management and includes a diagnostics function for checking the measuring accuracy of the arm.



MOBILE INSPECTION ACCURACY

- 1. Patented Infinite Rotation in the principle axes allows access to difficult-to-reach areas.
- 2. Kinematic Probe Joint, the same type used in Hexagon Metrology bridge CMMs, provides repeatable connection of probes, with no need for recalibration. Automatic probe recognition allows you to store hundreds of calibrated probe profiles for instant recall.
- 3. Compact Head is easy to hold and is used to inspect parts or to interact with the software when in "mouse mode." Integrated work light and digital camera graphically document setups.
- 4. Infinitely rotating, low-friction, patented SpinGrips allow the arm to "float" for better user ergonomics. SpinGrips allow the arm to "float" in the operator's hands, maximizing accuracy and minimizing user fatigue.
- 5. Absolute Encoders improve overall accuracy and eliminate "homing" procedures.
- 6. Carbon Fiber Tubes provide a lightweight, stiff structure that is thermally stable.
- 7. Low Profile Zero-G Counterbalance balances the arm's weight for easy operation with effortless control, even above and below the arm's centerline. Better ergonomics means lower operator fatigue and better measuring results.
- 8. Integrated handle and lifting point under counterbalance allow for easy carrying.
- 9. Feature Packs plug into the base and provide interchangeable and upgradeable add-on capabilities such as WiFi connection, battery power, scanning and more.
- 10. Universal thread mount base attaches to a variety of available base and stand options including magnetic bases. (shown)



6 AXIS ARM WITH TACTILE PROBE

Designed with 6 axes of infinite rotation, the ROMER Absolute Arm is ideal for multiple applications on a wide array of workpieces. The absolute portability of a ROMER arm means you can put it to work all around your facility to take on varied tasks such as:

Large Part and Assembly Inspection

When moving the part is impractical or impossible, a ROMER arm can be taken to the part's location. The Absolute Arm is available in the largest size ever: an industry-first 14.8 foot (4.5m) measuring volume.

First Article Inspection

Faster than traditional methods, first article checks can take place right on the shop floor so production can keep moving.

3D Alignment

Precise 3D positioning of parts for assembly, setting up tooling and fixturing, and verification of position are all possible with an Absolute Arm.

On-Machine Inspection and Verification

Using a ROMER arm on the bed of a machining center, critical dimensions can be inspected before further processing takes place. It is ideal for materials that would deform if removed from the machine.

Incoming Quality Control

Arriving parts can be inspected right on the dock for immediate feedback if they meet critical specifications.



7 AXIS ARM FOR EXTERNAL SCANNERS

The ROMER Absolute Arm SE is a 7 axis portable inspection system designed for use with interchangeable external laser scanners, such as the CMS108. It uses a TESA kinematic joint (TKJ) connection. The benefits of choosing the 7 axis external scanner configuration include the ability to share a single scanner among multiple devices, including arms of different sizes or a stationary device such as a bridge or gantry CMM. When sharing a scanner, the arm is still usable for single point tactile probing.

Quick Facts:

- Designed for interchangeable laser scanners, such as the CMS108
- Share one scanner between multiple devices
- Internal cabling
- Open platform for future upgrades with TESA connectors and Feature Pack technology
- Available in measuring ranges from 6.6 ft (2 m) to 14.8 ft (4.5 m)



7 AXIS ARM WITH INTEGRATED SCANNER

The ROMER Absolute Arm SI has a laser scanner integrated into the wrist. When combined with the FP3 Feature Pack, the arm is able to scan wirelessly with no degradation of data. Its rechargeable hot swappable batteries enable true wireless use of the Absolute Arm. This completely integrated scanning

Quick Facts:

- Fully integrated-no additional cables or controller box
- Collects up to 50,000 points per second
- The FP3 feature pack enables wireless scanning at the same data collection rate
- Hot swappable rechargeable batteries enable all-day inspections
- Semi-automatic laser power and exposure control

system is factory calibrated and certified as a system to B89 specifications. The scanner requires no warm up time; coupled with no requirement for homing procedures means an operator can be scanning in just moments.

- No warm-up time
- Tested as a complete system to B89.4.22
- No coating or surface preparation necessary
- Scanning and probing interchangeable, automated probe recognition means no recalibration
- Available in measuring ranges from 6.6 ft (2 m) to 14.8 ft (4.5 m)

TUBE INSPECTION

Increase tube shop productivity while reducing scrap with the ROMER Tube Inspection System. It can generate tube design, inspect, adjust bend corrections, reverse engineer and certify fixtures.

Ideal for manual and CNC tube and wire bending processes, the ROMER Absolute Arm equipped with a non-contact infrared probe takes points by simply detecting the tube section as it is passed between the sensors. It also features intuitive laser light probe guidance to aid the operator in clearly seeing where points are taken. The non-contact system is able to inspect any type of material, including those that are soft or fragile.

Data Overlay Camera System (DOCS), the CAD-based inspection software, gives you the option to communicate directly with CNC tube benders. Besides tube and wire, DOCS is able to inspect profiles such as brackets, flanges, bosses or other geometric features.

NON-CONTACT LASER SCANNING

The possibilities for 3D laser scanning are limited only by your imagination. Common applications include:

Inspection and Validation

Laser scanning produces a 3D point cloud for cloud-to-CAD comparison, feature recognition for dimensional inspection, part mating, contour measurement and GD&T analysis.

Reverse Engineering

Parts are quickly digitized and the resulting 3D model can be converted to CAD to describe a sample or prototype part.

Rapid Prototyping

A sample part or physical model is scanned and converted to an STL file representation of the part, which can then be reproduced with a 3D printer.

Copy Milling

CAM software is used to read the scan cloud data and produce machining instructions for machine tools.

Historical Preservation

3D scans of priceless artifacts can be created without touching them. This aids in archival, preservation or restoration work and also allows the creation of a 3D record, model or copy.

PC-DMIS PORTABLE

With the world's largest installed base of any measurement and inspection software, PC-DMIS is the ideal match for ROMER portable CMMs. PC-DMIS Portable is fast and intuitive to learn, especially for users already familiar with the PC-DMIS environment.

The interface is specifically designed for the arm user, with larger menus, buttons, and a virtual keyboard for direct interaction when using the arm in "mouse mode." PC-DMIS Portable inspects parts in real-time, generates inspection programs and produces clear, concise CAD-to-part reports.

Quick Start GUI — Commonly used functions are grouped together into one compact interface.

Automatic Programming — Part programs are automatically created during inspection, for recall and later reuse. Guided inspection routines with visual cues and comments are easily created for repetitive inspections.

Guess Mode — PC-DMIS automatically recognizes feature types as you measure — just measure a circle and it's recognized as a circle. **Automatic Nominals** — Feature nominal values are automatically retrieved from the CAD file during measurement, no manual data entry is required.

Any-Order Measure — Probe or scan parts in the most convenient and efficient order without having to follow the steps of an inspection routine.

Aligning Contoured Parts — Quickly align even the most complex parts. A range of algorithms for best fit and iterative alignments are included.

Sheetmetal Measurements — PC-DMIS Portable offers an optional library of sheetmetal measurement routines.

CAD File Compatibility — PC-DMIS Portable has translators for all major CAD formats, plus optional direct CAD interfaces, which read and use the native CAD formats, without translation.

Customizable Reporting Tools — Customizable inspection reports are created automatically, which are compatible with Microsoft Excel[™], PDF and RTF formats. Data for SPC analysis can be automatically transferred in real time to the DataPage+ SPC package.

PC-DMIS RESHAPER

Scanned data can be applied to a wide variety of applications beyond simple measurement. PC-DMIS Reshaper offers a specialized set of tools to create high quality 3D models for reverse engineering, CAD-comparison, or part duplication.

Online or offline, PC-DMIS Reshaper is capable of connecting live to a measuring device for data collection or can function as a stand-alone application for the processing, meshing and editing of point cloud data.

PC-DMIS RESHAPER CAPABILITIES INCLUDE:

Point Cloud Processing

- · Manage the largest point clouds easily
- · Manipulate, edit, merge and separate point clouds
- · Easily register, align and best fit clouds
- · Remove extraneous data and reduce noise

Meshing Capabilities

- Reduce and optimize polygon mesh data
- Optimize meshing along high curvature areas
- Smooth, repair and deform shapes in 3D for mesh adaptation
- Fill holes to bridge missing data

3D Control and Inspection

- Import files in IGES and STEP formats
- Compare surfaces and contours
- CAD-comparison mapping of surfaces in color with variable scales and movable data flags

Reverse Engineering

- Model parts in 3D for further CAD design or adaption
- Create a "legacy" or "golden part" where no CAD or part drawing exists
- Analyze competitive parts and products
- Preserve 3D records of artifacts for archival or historical purposes
- Output high quality 3D mesh models for rapid prototyping, tool path generation, animation, simulation, finite element analysis, control and inspection, sectioning, etc.
- Generate NURBS surfaces for further CAD design or adaptation

Point Clouds

Point Clouds

Curve Network

Surfaces

ROMER ABSOLUTE ARM PRODUCT LINE SPECIFICATIONS

Configurations	73 Series 6 Axis Arm	75 Series 6 Axis Arm	73 Series External Scanner	75 Series External Scanner	73 Series Integrated Scanner	75 Series Integrated Scanner	73 Series Tube Inspection
Zero G Counterbalance with Lock	Standard	Standard	Standard	Standard	Standard	Standard	Reinforced
SpinGrips	N/A	Standard	N/A	Standard	N/A	Standard	N/A
TesaTKJ Connector	Standard	Standard	Standard	Standard	Standard	Standard	Standard
3 TESA Hard Probes	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Feature Pack	Optional	Mobility Pack	Scanning Pack	Scanning Pack	Scanning Pack	Scanning Pack	Optional
Digital Camera	N/A	Standard	N/A	N/A	N/A	N/A	N/A
LED Worklight	N/A	Standard	N/A	N/A	N/A	N/A	N/A
Calibration Sphere	Standard	Standard	Standard	Standard	Standard	Standard	Standard
NIST Traceable Length Standard Bar	Optional	Standard	Optional	Standard	Optional	Standard	Optional
Hard Case	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Dust Cover	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Base	Bolt-down base plate	Magnetic	Bolt-down base plate	Magnetic	Bolt-down base plate	Magnetic	Bolt-down base plate
Application Software	PC-DMIS Portable	PC-DMIS Portable	PC-DMIS Portable or PC-DMIS Reshaper	PC-DMIS Portable or PC-DMIS Reshaper	PC-DMIS Portable or PC-DMIS Reshaper	PC-DMIS Portable or PC-DMIS Reshaper	PC-DMIS Portable or DOCS
Utility Software	RDS	RDS	RDS	RDS	RDS	RDS	RDS
SmartLock	Standard	Standard	Standard	Standard	Standard	Standard	Standard

Volumetric Performance Test: Results analyzed via Range/2 method. Volumetric length accuracy is determined by using certified length standards that are measured at various locations and orientations throughout the measuring volume. This test most accurately represents the reasonable expectations for machine performance in practical measuring applications. The Volumetric Length Accuracy Test is the most appropriate test for determining machine accuracy and repeatability since it involves measuring a certified length standard many times in several locations and orientations and compares the resultant measurements to the actual length.

Point Repeatability Test (also known as Single Point Articulation Test, or S.P.A.T.): Results analyzed via Range/2 method. The probe is placed within a trihedral seat or conical socket, and individual points are measured from multiple approach angles with maximum articulation of all of the principal joints. Each individual point measurement is analyzed as a range of deviations about the average value for the point locations. This test is to assess the arm's ability to provide similar values of a point coordinate, when the arm is articulated through the maximum possible range of motion for that single point.

Scanning System Accuracy Test: This test most accurately represents the reasonable expectations for machine performance in practical measuring applications while using the laser scanning method. The test methodology is based upon the B89 specification for hard probing, in the absence of specific guidelines for laser scanners. The test consists of measuring a matte grey sphere with 5 different arm articulations. In each articulation of the arm the sphere is scanned from 5 different directions such that the majority of the sphere is scanned. The result is the maximum 3D center to center distance of the 5 spheres.

Specifications are subject to change without notice. Go to http://hexagonmetrology.us/romer for latest information. Working temperature: $32^{\circ}F - 122^{\circ}F (0^{\circ}C - 50^{\circ}C)$ Storage temperature: $-22^{\circ}F - 158^{\circ}F (-30^{\circ}C - 70^{\circ}C)$ Humidity: 10% - 90% non-condensing Operational elevation: 0-6600 ft. (0-2000 m) Power requirement: Universal worldwide voltage 110-240 Certification: CE compliant

6 Axis Absolute Arm for Tactile Measurements

Performance Data	Model	Measuring Range	Point Repeatability	Volumetric Accuracy	Arm Weight
	7315	4.9 ft. (1.5 m)	±0.0010 in. (0.025 mm)	±0.0015 in. (0.037 mm)	15.6 lbs. (7.1 kg)
	7320	6.6 ft. (2.0 m)	±0.0012 in. (0.030 mm)	±0.0017 in. (0.042 mm)	16.3 lbs. (7.4 kg)
	7325	8.2 ft. (2.5 m)	±0.0015 in. (0.038 mm)	±0.0020 in. (0.051 mm)	17.0 lbs. (7.7 kg)
73 Series	7330	9.8 ft. (3.0 m)	±0.0023 in. (0.059 mm)	±0.0030 in. (0.075 mm)	17.6 lbs. (8.0 kg)
	7335	11.5 ft. (3.5 m)	±0.0031 in. (0.079 mm)	±0.0040 in. (0.100 mm)	18.3 lbs. (8.3 kg)
	7340	13.1 ft. (4.0 m)	±0.0039 in. (0.099 mm)	±0.0049 in. (0.125 mm)	19.0 lbs. (8.6 kg)
	7345	14.8 ft. (4.5 m)	±0.0047 in. (0.120 mm)	±0.0059 in. (0.150 mm)	19.6 lbs. (8.9 kg)
75 Series	7520	6.6 ft. (2.0 m)	±0.0006 in. (0.016 mm)	±0.0009 in. (0.023 mm)	17.0 lbs. (7.7 kg)
	7525	8.2 ft. (2.5 m)	±0.0008 in. (0.020 mm)	±0.0011 in. (0.029 mm)	17.6 lbs. (8.0 kg)
	7530	9.8 ft. (3.0 m)	±0.0012 in. (0.030 mm)	±0.0017 in. (0.044 mm)	18.3 lbs. (8.3 kg)
	7535	11.5 ft. (3.5 m)	±0.0016 in. (0.040 mm)	±0.0022 in. (0.057 mm)	19.0 lbs (8.6 kg)
	7540	13.1 ft. (4.0 m)	±0.0022 in. (0.055 mm)	±0.0027 in. (0.069 mm)	19.6 lbs (8.9 kg)
	7545	14.8 ft. (4.5 m)	±0.0028 in. (0.070 mm)	±0.0032 in. (0.082 mm)	20.3 lbs. (9.2 kg)

7 Axis Absolute Arm for External Scanning

Performance Data	Model	Measuring Range	Point Repeatability	Probing Volumetric Accuracy	Arm Weight
73 Series SE	7320SE	6.6 ft. (2.0 m)	±0.0017 in. (0.044 mm)	±0.0024 in. (0.061 mm)	17.4 lbs. (7.9 kg)
	7325SE	8.2 ft. (2.5 m)	±0.0019 in. (0.049 mm)	±0.0027 in. (0.069 mm)	18.1 lbs. (8.2 kg)
	7330SE	9.8 ft. (3.0 m)	±0.0031 in. (0.079 mm)	± 0.0040 in. (0.100 mm)	18.7 lbs. (8.5 kg)
	7335SE	11.5 ft. (3.5 m)	±0.0039 in. (0.099 mm)	±0.0049 in. (0.125 mm)	19.4 lbs. (8.8 kg)
	7340SE	13.1 ft. (4.0 m)	±0.0045 in. (0.115 mm)	±0.0059 in. (0.151 mm)	20.1 lbs. (9.1 kg)
	7345SE	14.8 ft.(4.5 m)	±0.0056 in. (0.141 mm)	±0.0070 in. (0.179 mm)	20.7 lbs. (9.4 kg)
75 Series SE	7520SE	6.6 ft. (2.0 m)	±0.0009 in. (0.023 mm)	±0.0013 in. (0.033 mm)	18.1 lbs. (8.2 kg)
	7525SE	8.2 ft. (2.5 m)	±0.0011 in. (0.027 mm)	±0.0015 in. (0.038 mm)	18.7 lbs. (8.5 kg)
	7530SE	9.8 ft. (3.0 m)	±0.0017 in. (0.042 mm)	±0.0023 in. (0.058 mm)	19.4 lbs. (8.8 kg)
	7535SE	11.5 ft. (3.5 m)	±0.0022 in. (0.055 mm)	±0.0032 in. (0.081 mm)	20.1 lbs. (9.1 kg)
	7540SE	13.1 ft. (4.0 m)	±0.0026 in. (0.067 mm)	±0.0039 in. (0.098 mm)	20.7 lbs. (9.4 kg)
	7545SE	14.8 ft. (4.5 m)	±0.0033 in. (0.084 mm)	±0.0047 in. (0.119 mm)	21.4 lbs. (9.7 kg)

All specifications according to B89.4.22 and VDI/VDE 2617-9.

RS2 Integrated Scanner and CMS108 Specifications

Configurations	Integrated Scanner RS2	CMS108
Max. Point acquisition rate	50,000 Points/s	30,000 Points/s
Points per Line	1,000	Max. 2,000
Line Rate	50 Hz	Max. 53 Hz
Line width	53 mm - 110 mm	124mm/ 60mm/ 24mm
Stand off	150 mm ±50 mm	180mm ±40mm
Point spacing (min)	0.046 mm	Min. 0.025mm
Laser power control	Semi-automatic - per line	Automatic (per point)
Accuracy (2 sigma)	30 µm	20 µm
Weight	340 g	398g/14oz
Controller	Feature Pack	External Controller
Laser Safety	Class 2M	Class 2
Working Temperature	5°C - 40°C (41°F - 104°F)	10° - 42° C (50° - 108° F)

7 Axis SI Absolute Arm with Internal Scanner

Performance Data	Model	Measuring Range	Point Repeatability	Probing Volumetric Accuracy	Scanning System Accuracy (with RS2 Scanner)	Arm Weight
73 Series SI	7320SI	6.6 ft. (2.0 m)	±0.0017 in. (0.044 mm)	±0.0024 in. (0.061 mm)	±0.0016 in. (0.040 mm)	18.3 lbs. (8.3 kg)
	7325SI	8.2 ft. (2.5 m)	±0.0019 in. (0.049 mm)	±0.0027 in. (0.069 mm)	±0.0017 in. (0.024 mm)	19.0 lbs. (8.6 kg)
	7330SI	9.8 ft. (3.0 m)	±0.0031 in. (0.079 mm)	± 0.0040 in. (0.100 mm)	±0.0024 in. (0.060 mm)	19.6 lbs. (8.9 kg)
	7335SI	11.5 ft. (3.5 m)	±0.0039 in. (0.099 mm)	±0.0049 in. (0.125 mm)	±0.0029 in. (0.074 mm)	20.3 lbs. (9.2 kg)
	7340SI	13.1 ft. (4.0 m)	±0.0045 in. (0.115 mm)	±0.0059 in. (0.151 mm)	±0.0036 in. (0.091 mm)	20.9 lbs. (9.5 kg)
	7345SI	14.8 ft. (4.5 m)	±0.0056 in. (0.141 mm)	±0.0070 in. (0.179 mm)	±0.0042 in. (0.107 mm)	21.6 lbs. (9.8 kg)
75 Series Sl	7520SI	6.6 ft. (2.0 m)	±0.0009 in. (0.023 mm)	±0.0013 in. (0.033 mm)	±0.0012 in. (0.029 mm)	19.0 lbs. (8.6 kg)
	7525SI	8.2 ft. (2.5 m)	±0.0011 in. (0.027 mm)	±0.0015 in. (0.038 mm)	±0.0013 in. (0.032 mm)	19.6 lbs. (8.9 kg)
	7530SI	9.8 ft. (3.0 m)	±0.0017 in. (0.042 mm)	±0.0023 in. (0.058 mm)	±0.0017 in. (0.042 mm)	20.3 lbs. (9.2 kg)
	7535SI	11.5 ft. (3.5 m)	±0.0022 in. (0.055 mm)	±0.0032 in. (0.081 mm)	±0.0020 in. (0.051 mm)	20.9 lbs. (9.5 kg)
	7540SI	13.1 ft. (4.0 m)	±0.0026 in. (0.067 mm)	±0.0039 in. (0.098 mm)	±0.0024 in. (0.060 mm)	21.6 lbs. (9.8 kg)
	7545SI	14.8 ft. (4.5 m)	±0.0033 in. (0.084 mm)	±0.0047 in. (0.119 mm)	±0.0027 in. (0.070 mm)	22.3 lbs. (10.1 kg)

All specifications according to B89.4.22

7 Axis SE Absolute Arm with CMS108

73 Series SE	7320SE	6.6 ft. (2.0 m)	±0.0017 in. (0.044 mm)	±0.0024 in. (0.061 mm)	0.0030 in. (0.075 mm)	17.4 lbs. (7.9 kg)
	7325SE	8.2 ft. (2.5 m)	±0.0019 in. (0.049 mm)	±0.0027 in. (0.069 mm)	0.0031 in. (0.080 mm)	18.1 lbs. (8.2 kg)
	7330SE	9.8 ft. (3.0 m)	±0.0031 in. (0.079 mm)	± 0.0040 in. (0.100 mm)	0.0044 in. (0.113 mm)	18.7 lbs. (8.5 kg)
	7335SE	11.5 ft. (3.5 m)	±0.0039 in. (0.099 mm)	±0.0049 in. (0.125 mm)	0.0055 in. (0.140 mm)	19.4 lbs. (8.8 kg)
	7340SE	13.1 ft. (4.0 m)	±0.0045 in. (0.115 mm)	±0.0059 in. (0.151 mm)	0.0068 in. (0.172 mm)	20.1 lbs. (9.1 kg)
	7345SE	14.8 ft. (4.5 m)	±0.0056 in. (0.141 mm)	±0.0070 in. (0.179 mm)	0.0080 in. (0.203 mm)	20.7 lbs. (9.4 kg)
75 Series SE	7520SE	6.6 ft. (2.0 m)	±0.0009 in. (0.023 mm)	±0.0013 in. (0.033 mm)	0.0021 in. (0.053 mm)	18.1 lbs. (8.2 kg)
	7525SE	8.2 ft. (2.5 m)	±0.0011 in. (0.027 mm)	±0.0015 in. (0.038 mm)	0.0023 in. (0.058 mm)	18.7 lbs. (8.5 kg)
	7530SE	9.8 ft. (3.0 m)	±0.0017 in. (0.042 mm)	±0.0023 in. (0.058 mm)	0.0031 in. (0.078 mm)	19.4 lbs. (8.8 kg)
	7535SE	11.5 ft. (3.5 m)	±0.0022 in. (0.055 mm)	±0.0032 in. (0.081 mm)	0.0038 in. (0.96 mm)	20.1 lbs. (9.1 kg)
	7540SE	13.1 ft. (4.0 m)	±0.0026 in. (0.067 mm)	±0.0039 in. (0.098 mm)	0.0045 in. (0.114 mm)	20.7 lbs. (9.4 kg)
	7545SE	14.8 ft. (4.5 m)	±0.0033 in. (0.084 mm)	±0.0047 in. (0.119 mm)	0.0052 in. (0.133 mm)	21.4 lbs. (9.7 kg)

FOR ALL THE LATEST ROMER ACCESSORIES VISIT OUR ONLINE STORE AT WWW.SHOPMETROLOGY.COM

Service State

Portable Measuring Arms

Bridge CMMs

Horizontal Arm CMMs

Laser Trackers & Stations

Gantry CMMs

Multisensor & Optical Systems

White Light Scanners

Ultra High Accuracy CMMs

Hexagon Metrology offers a comprehensive range of products and services for all industrial metrology applications in sectors such as automotive, aerospace, energy and medical. By empowering our customers to fully control their manufacturing processes, we enhance the quality of products and increase efficiency in manufacturing plants around the world.

For more information, visit www.hexagonmetrology.us/romer www.hexagonmetrology.com +1 800 274 9433

Hexagon Metrology is part of Hexagon (Nordic exchange: HEXA B). Hexagon is a leading global provider of design, measurement and visualisation technologies that enable customers to design, measure and position objects, and process and present data.

Learn more at www.hexagon.com.

Scan this code or visit www.HexMet.us/romerarm to see a demo of the ROMER arm.

ISO 9001:2000 and 17025 certified

© 2012 Hexagon Metrology, Inc. - Part of Hexagon

All rights reserved. Due to continuing product development, Hexagon Metrology reserves the right to change product specifications without prior notice.

Printed in USA. December 2012

990194