

## Trimble 3600 Total Station Series

*Highly productive, innovative 3D measuring system*

### Key Features and Benefits

- A Easy to operate
- A Extensive software choice
- A Productive surveying system
- A Integrated Surveying
- A Reflectorless measurement

Whether you work as a topographic, cadastral, building or construction surveyor, the innovative Trimble 3600 Total Station series is designed to optimize your workflow and field productivity.

### Increased Productivity

For operation in high productivity environments, the QuickDrive, Clamp Free Operation and Endless Slow Motion deliver huge productivity gains over conventional tangent screws.

### DR Measurement Mode

The innovative DR EDM system option is ideal for surveying where the target is difficult, impossible or dangerous to reach. It opens up a world of new applications – building elevation surveys, tunnel profiling, measuring to objects on private land, and safe positioning of points in active traffic. This system enables you to measure to any object within 80m (standard Kodak Grey 18% reflective) and up to 150m (Kodak White card 90% reflective), with no need for a prism.

### Data Capture

The 3600 series instruments have a large illuminated display with 8 lines of 40 characters controlled by a menu system and simple alphanumeric key operation. An open system DOS architecture allows you to use the Elta software applications. As an alternative, the 3600 series can be config-



*The productive Trimble 3600 Total Station series is ideal for all types of survey work.*

ured with a new Geodimeter Control Unit with color-coded keys. Existing Geodimeter system users can move to the new platform with no change to their routine operation. The control unit contains the built-in memory with a capacity for up to 8,000 points. The 3600 series also features 4MB of on-board data storage and programming capability for custom application software.

### Wireless Communications with the Office

The 3600 series utilizes industry standard infrared (IR) communications in addition to conventional RS-232 communications. Using the IR communication port you can transfer files to and from certain cellular phones without the need for a cable. The cellular phone can transfer your data to or from the office

without the need for you to ever leave site – ideal when you arrive at the job site without all your data!

### Integrated Surveying

The 3600 series is the ideal complement to the Trimble GPS Total Station 5700, providing a means of filling in detail that cannot be acquired using GPS. The two are seamlessly linked using the TSC1 controller, enabling you to easily switch between RTK and total station measurement. All the combined data can be processed and analyzed within the Trimble Geomatics Office software.

Providing all the benefits of a conventional total station, with optional DR capability, the Trimble 3600 Total Station series can make you even more productive than before.

# Trimble 3600 Total Station Series

## PERFORMANCE SPECIFICATIONS

### Angle measurement

#### Accuracy (Standard deviation based on DIN 18723)

3601	1.5" (0.46 mgon)
3602	2" (0.6 mgon)
3603	3" (0.9 mgon)
3605	5" (1.5 mgon)

Angle reading (least count) 0.1" (0.01 mgon)

Automatic level compensator Dual-axis compensator  $\pm 5'$  ( $\pm 90$  mgon)

### Distance measurement

#### Accuracy

##### Prism

Standard measurement	$\pm(2 \text{ mm} + 2 \text{ ppm})$ (0.007 ft + 2 ppm)
Rapid	$\pm(3 \text{ mm} + 2 \text{ ppm})$ (0.01 ft + 2 ppm)
Tracking	$\pm(5 \text{ mm} + 2 \text{ ppm})$ (0.016 ft + 2 ppm)

##### Reflex tape

Standard measurement	$\pm(3 \text{ mm} + 2 \text{ ppm})$ (0.01 ft + 2 ppm)
Rapid	$\pm(3 \text{ mm} + 2 \text{ ppm})$ (0.01 ft + 2 ppm)
Tracking	$\pm(5 \text{ mm} + 2 \text{ ppm})$ (0.016 ft + 2 ppm)

##### Direct reflex mode

Standard measurement	$\pm(3 \text{ mm} + 2 \text{ ppm})$ (0.01 ft + 2 ppm)
Rapid	$\pm(5 \text{ mm} + 2 \text{ ppm})$ (0.016 ft + 2 ppm)
Tracking	$\pm(10 \text{ mm} + 2 \text{ ppm})$ (0.032 ft + 2 ppm)

#### Shortest possible range:

(to prism and direct reflex)	1.5 m (4.9 ft) [not allowed in long range mode]
(to reflective foil)	2.5 m (8.2 ft)

### Measuring time

#### Prism mode

Standard measurement	< 2 s
Rapid	< 1.8 s
Tracking	< 0.4 s

#### Direct reflex mode

Standard measurement	3 s up to 30 m + 1 s/10 m
Rapid	2 s up to 30 m + 1 s/10 m
Tracking	0.8 s up to 30 m + 1 s/10 m

#### Range (at standard clear\*)

1 prism	3000 m (1.9 miles)
1 prism Long Range Mode	1000 m - 5000 m (0.6 miles - 3.1 miles)
3 prisms	5000 m (3.1 miles)
3 prisms Long Range Mode	1000 m - 7500 m (0.6 miles - 4.7 miles)

Reflective foil 20 mm Normal	100 m (328 ft)
Reflective foil 20 mm Long Range Mode	200 m (656 ft)
Reflective foil 60 mm Normal	250 m (820 ft)
Reflective foil 60 mm Long Range Mode	800 m (2625 ft)

#### Range Direct Reflex measurement on

##### Kodak Gray Card: Cat.No. E1527795

Kodak Gray (18% reflective)	80 m (262 ft)
Kodak Gray (90% reflective)	120 m (394 ft)

\* Standard clear: No haze, overcast or moderate sunlight with very light heat shimmer. Range and accuracy are dependent on atmospheric conditions and background radiation.

## GENERAL SPECIFICATIONS

Light source	Laserdiode 660 nm class 1 to prism; class 2 direct reflex
Beam divergence	0.4 mrad
Atmospheric correction	Sensors for temperature and pressure in the instrument
Leveling	
Circular level in tribrach	Circular level 8' / 2 mm
Clamps and slow motion drives	Co-axial, friction clamp with endless slow motion
Centering	
Centering System	Trimble 3-pin or DIN
Optical plummet	Optional
Laser plummet	Optional
Magnification / Shortest focussing range	2.4 x / 0.5 m - infinity
Telescope	
Magnification	30 x
Aperture	40 mm (1.57 in)
Focussing range:	Shortest focussing range 1.5 m (4.92 ft)
Field of view at 100 m	1.2°, 2.2 m / 100 m (7.21 ft / 328 ft)
Illuminated crosshair:	Yes
Keyboard	
Zeiss Elta Panel	Attached Zeiss Elta Panel Dual Face Zeiss Elta Panels
Goodimeter CU600	Detachable CU600, alphanumeric Detachable CU600, numeric

Display screen	
Zeiss Elta	8 lines by 40 columns, CGA graphic display (320 x 80 pixels), illuminated, 28 keys
Goodimeter CU alphanumeric	33 keys, 4 line LCD, 20 characters/ line, illuminated
Goodimeter CU numeric	22 keys, 4 line LCD, 20 characters/ line, illuminated
Tracklight	Optional
Operating temperature:	-20°C to +50°C (-5°F to +122°F)
Water proofing	IPX 4
Power supply	
Internal battery	NiMH battery pack, 6 V, 3.5 Ah, rechargeable Charging time on empty: 1.5 hours Operating time: approx. 8.5 hours
External battery	NiMH battery pack, 6 V, 7.0 Ah, rechargeable Charging time on empty: 3.5 hours Operating time: approx. 12 hours
Weight	< 6.7 kg (14.8 lbs)
Dimensions	
Instrument	222 x 370 x 185 mm (8.7 x 14.6 x 7.3 in)
Trunnion axis height - 3-pin or DIN	196 mm / 205 mm / 175 mm (7.7 in / 8.1 in / 6.9 in)

Certified quality in accordance with DIN ISO 9001:EN 29001.

CLASS I and II LASER PRODUCT  
Complies with 21 CFR 1040.10



## HARDWARE FEATURES

Internal buffer battery	Optional, 2 minute operation	Goodimeter CU	Detachable Control Unit, Two-way RS-232
Tracklight	Optional	Software	
Internal Hardware	486 MS- DOS PC	Zeiss Elta panel	4 Zeiss Elta Software packages available: Basic, Expert, Special and Professional
Data recording		Zeiss Elta panel	3rd party software of your choice, e.g. TDS Survey Pro
Zeiss Elta panel	Internal memory > 4MB	Goodimeter CU	Extensive library of powerful programs for Data collection and Field Calculations are available
CU600	up to 8,000 points		
Data Transfer			
Zeiss Elta panel	RS232 - Slipring, IR Communication		

## ORDERING INFORMATION

For further information please contact your nearest Trimble Authorized Distributor or Trimble Office.

You may also visit our website at <http://www.trimble.com>



NORTH AMERICA  
Trimble Engineering and  
Construction Division  
5425 Kellenburger Road  
Dayton, Ohio 45424-1089 U.S.A.  
800-538-7830 (Toll Free in U.S.A.)  
+1-537-233-8521 Phone  
+1-537-233-8004 Fax  
[www.trimble.com](http://www.trimble.com)

EUROPE  
Trimble GmbH  
Am Prime Parc 11  
85479 Raunheim  
GERMANY  
+49-6142-21000 Phone  
+49-6142-2100550 Fax

ASIA-PACIFIC  
Trimble Navigation  
Australia Pty Limited  
Level 1/123 Gotha Street  
Fortitude Valley, Q.L.D. 4006  
AUSTRALIA  
+61-7-3216-0044 Phone  
+61-7-3216-0088 Fax

Your Local Trimble Office or Representative