

LEICA TPS400 Series, an overview of the models

Features

- Graphical display
- Reflectorless measuring
- Endless fine drive
- Laser plummet
- Dual axis compensator

Applications

- Surveying
- Reference line
- Stake Out
- Free Station
- Height transfers
- Area calculations
- Tie distance
- Remote height
- Construction

Distance meter

(RL, TCR400power):

Laser class 3R in accordance with IEC 60825-1 resp. EN 60825-1
Laser class IIIa in accordance with FDA 21CFR Ch. I § 1040



Distance meter (RL, standard range) and laser plummet:

Laser class 2 in accordance with IEC 60825-1 resp. EN 60825-1
Laser class II in accordance with FDA 21CFR Ch. I § 1040



Distance meter (IR):

Laser class 1 in accordance with IEC 60825-1 resp. EN 60825-1
Laser class I in accordance with FDA 21CFR Ch. I § 1040

EGL guide light:

LED class 1 in accordance with IEC 60825-1 resp. EN 60825-1

TPS800 complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.

Your dealer:

The *Bluetooth* word mark and logos are owned by Bluetooth SIG, Inc. and any use of such marks by Leica Geosystems AG is under license. Other trademarks and trade names are those of their respective owners.

Illustrations, descriptions and technical data are not binding and may be changed. Printed in Switzerland. Copyright Leica Geosystems AG, Heerbrugg, Switzerland, 2004. 732270en - IX.04 - RVA

Technical Data	TPS 403	TPS 405	TPS 407	TPS 800
Angle measurements (Hz, V)				
Method	Absolute continuous			
Display resolution	1" / 0.1 mgon / 0.01 mil			
Standard deviation (ISO 17123-3)	3" (1 mgon)	5" (1.5 mgon)	7" (2 mgon)	2" 3"
Telescope				
Magnification	30 x (42x with FOK53 eyepiece)			
Field of view	1°30' (26 m at 1 km)			
Min. target distance	1.7 m			
Reticle	illuminated			
Compensator				
System	Electronic 2 axis oil compensator			
Working range	+/-4' (0.07 gon)			
Setting accuracy	1"	1.5"	2"	0.5" 1"
Distance measurement (IR)				
Measuring range with circular prism GPR1	3 500 m			
Measuring with reflective foil (60 mm x 60 mm)	250 m			
Standard deviation (ISO 17123-4) (fine/quick/tracking)	2 mm + 2 ppm / 5 mm + 2 ppm / 5 mm + 2 ppm			
Time for a measurement (fine/quick/tracking)	< 1 sec / < 0.5 sec / < 0.3 sec			
Reflectorless Distance measurement (RL)				
Measuring range with target plate (Kodak Gray Card)	80 m (TCR400) / 170 m (TCR400power)			170 m
Measuring range with circular prism GPR1	5 000 m (TCR400) / 10 000 m (TCR400power)			10 000 m
Standard deviation (ISO 17123-4) (short/prism/tracking)	3 mm + 2 ppm / 5 mm + 2 ppm / 5 mm + 2 ppm			
Time for a measurement type (short/prism/tracking)	3.0 sec / 2.5 sec / 1.0 sec			
Communication				
Internal data storage	10 000 data blocks			
Interface	RS232 up to 19 200 baud			
Data formats	GSI / IDEX / ASCII / Freely definable formats			
Operation				
Display	Graphics 160 x 280 pixels, Alphanumeric 8 lines x 31 characters			
Keyboard (with optional second keyboard)	4 function keys			Alphanumeric 4 function keys
Laser plummet				
Type	Laser point, brightness adjustable in steps			
Accuracy	1.5 mm at 1.5 m instrument height			
Environmental conditions				
Temperature range (operation)	-20°C to +50°C (-4°F to +122°F)			
Splash and dust proof (IEC 60529)	IP54			
Temperature range (storage)	-40°C to +70°C (-40°F to +158°F)			
Humidity	95%, non condensing			
Weight				
Weight including battery and tribrach	5.2 kg			5.4 kg
Power supply				
Battery type	NiMH camcorder type			
Voltage / capacity	GEB 111: 6V 2100 mAh / GEB121: 6V 4200 mAh			
External feed	with GEV71 interface cable for 11.5V to 14V			
Operating period with GEB121	approx. 6 hours			
Number of distance measurements with GEB121	approx. 9 000			



**Total Quality Management –
Our commitment to total
customer satisfaction.**

Ask your local Leica Geosystems dealer for more information about our TQM program.

Leica
Geosystems

Leica Geosystems AG
CH-9435 Heerbrugg
(Switzerland)

Phone +41 71 727 31 31
Fax +41 71 727 46 73

www.leica-geosystems.com