



New Reflectorless distance measurement technology "Multi Pulse"

Topcon's unique optical technology "Multi Pulse" enhanced the productivity

Reflectorless distance measurement up to 350M



GPT-3100N achieved Reflectorless distance measurement up to 350M, 140% improvement against previous model (250M)

Significant saving of power consumption



Multi Pulse optical system contributed to power consumption cut down from 4.7W to 3.6W (=20% down), but extended operating time to 5 hours (+120%)



It's time.

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Specifications subject to change without notice

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Specifications

	GPT-3102N	GPT-3103N	GPT-3105N	GPT-3107N
TELESCOPE				
Length	150mm			
Objective Lens Dia.	45mm (EDM 50mm)			
Magnification	30x			
Image	Erect			
Field of View	1°30'			
Resolving Power	2.8"			
Min. Focus Distance	1.3m (4.9 ft.)			
DISTANCE MEASUREMENT				
Prism Mode				
Measuring Range				
Mini prism	1,000m*			
1 prism	3,000m*/4,000m**			
3 prisms	4,000m*/5,300m**			
9 prisms	5,000m*/6,500m**			
* Condition 1: Slight haze with visibility about 20km (12.5 miles) moderate sunlight with light heat shimmer.				
** Condition 2: No haze with visibility about 40km(25 miles), overcast with no heat shimmer.				
Measuring Accuracy ¹⁾	Fine: ±(2mm+2ppm×D)m.s.e. Coarse: ±(7mm+2ppm×D)m.s.e.			
Measuring Time				
Fine mode 1mm: Approx.1.1 sec. (Initial 2.5 sec.)				
0.2mm: Approx. 1.5 sec. (Initial 3 sec.)				
Coarse mode 1mm/10mm: Approx. 0.8 sec. (Initial 2 sec.)				
Non-Prism Mode (Diffusing Surface)				
Measuring Range				
1.5m to 350m				
Measuring Accuracy				
±(3mm+2ppm×D)m.s.e.				
Coarse: ±(10mm)m.s.e.				
Measuring Time				
Fine mode 1mm: Approx. 1.7 sec. (Initial 3 sec.)				
0.2mm: Approx. 2.6 sec. (Initial 3.5 sec.)				
Coarse mode 1mm/10mm: Approx. 1.0 sec. (Initial 2.0 sec.)				
ANGLE MEASUREMENT				
Method				
Absolute Reading				
Detecting System				
H: 2 sides V: 2 sides H: 2 sides V: 1 side H: 1 side V:1 side				
Minimum Reading				
1"/5" (0.2/1mgon) 5"/10" (1/2mgon)				
Accuracy ²⁾				
2" (0.6mgon) 3" (1mgon) 5" (1.5mgon) 7" (2mgon)				
Diameter of Circle				
71mm				
DISPLAY				
Display Unit				
Graphics LCD 160 × 64 Dots with backlight				
2 sides 1 side				
Keyboard				
Alpha-Numeric key				
TILT CORRECTION (AUTOMATIC INDEX)				
Tilt Sensor				
Dual axis Single axis				
Method				
Liquid type				
Compensating Range				
±3'				
Correction Unit				
1" (0.1mgon)				
OTHERS				
The Number of Measuring Points				
Approx. 24,000 points				
Instrument Height				
176mm (6.93 in.)				
Laser Class				
Class 1 (for distance measurement) Class 2 (Laser Pointer on)				
LEVEL SENSITIVITY				
Circular Level				
10"/2mm				
Plate Level				
30"/2mm 40"/2mm				
DIMENSION				
336(H)×184(W)×172(L)mm/13.2(H)×7.2(W)×6.8(L)in.				
WEIGHT				
Instrument (with battery)				
5.3kg(11.6 lbs.)				
Plastic Carrying Case				
3.4kg (7.3 lbs.) (Weight of the carrying case may be slightly different due to specific market.)				
DURABILITY				
Protection against water and dust				
IP66 (with BT-52QA) (Based on the standard IEC 60529)				
Ambient Temperature Range				
-20°C to +50°C (-4°F to +122°F)				
BATTERY BT-52QA				
Maximum operating time (when fully recharged) at +20°C (+68°F)				
Angle measurement only/Including distance measurement				
45 hours/5 hours				

*1 D: Measuring Distance *2 Standard deviation based on DIN18723

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