

SPECIFICATIONS

	GTS-233N	GTS-235N	GTS-236N	GTS-239N		GTS-233N	GTS-235N	GTS-236N	GTS-239N
TELESCOPE					OTHERS				
Length	150mm				Instrument Height	176mm (6.93 in.)			
Objective Lens Dia.	45mm (EDM 50mm)				LEVEL SENSITIVITY				
Magnification	30x				Circular Level	10' /2mm			
Image	Erect				Plate Level	30" /2mm	40" /2mm		
Field of View	1°30'				OPTICAL PLUMMET TELESCOPE				
Resolving Power	2.5"				Magnification	3x			
Min. Focus Distance	1.3m (4.9 ft.)				Focusing Range	0.5 to infinity			
DISTANCE MEASUREMENT					Image	Erect			
Condition 1					Field of View (at 1.3m)	5° (114mmφ)			
1 prism	3,000m (9,900 ft.)		2,000m (6,600 ft.)		DIMENSION				
3 prisms	4,000m(13,200 ft.)		2,700m (8,900 ft.)		336(H)×184(W)×172(L)mm/13.2(H)×7.2(W)×6.9(L)in.				
9 prisms	5,000m(16,400 ft.)		3,400m(11,200 ft.)		WEIGHT				
Condition 2					Instrument (with battery)	4.9kg (10.8 lbs.)			
1 prism	3,500m(11,500 ft.)		2,300m (7,500 ft.)		Plastic Carrying Case	3.4kg (7.5 lbs.) (Weight of the carrying case may be slightly different due to specific market.)			
3 prisms	4,700m(15,400 ft.)		3,100m(10,200 ft.)		DURABILITY				
9 prisms	5,800m(19,000 ft.)		4,000m(13,200 ft.)		Protection against water and dust	IP66 (with BT-52QA) (Based on the standard IEC60529)			
Condition 1: Slight haze with visibility about 20km (12.5 miles) moderate sunlight with light heat shimmer.					Ambient Temperature Range	-20°C to +50°C (-4°F to +122°F)			
Condition 2: No haze with visibility about 40 km (25 miles), overcast with no heat shimmer.					BATTERY BT-52Q				
Accuracy	±(2mm + 2ppm × D) m.s.e.		±(3mm+3ppm×D)m.s.e.		Output Voltage	DC7.2V			
D: Measuring distance (mm)					Capacity	2.7 Ah (Ni-MH)			
Least Count in Measurement					Maximum operating time (when fully recharged) at +20°C (+68°F)				
Fine Measurement Mode	1mm (0.005 ft.)/0.2mm (0.001 ft.)				Including distance measurement	10 hours			
Coarse Measurement Mode	10mm (0.02 ft.)/1mm (0.005 ft.)				Angle measurement only	45 hours			
Tracking Measurement Mode	10mm (0.02 ft.)				Weight	0.3kg (0.7 lbs.)			
Measurement Display	12 digits: max. display 99999999.9999				BATTERY CHARGER BC-27				
Measuring Time					Input Voltage	AC 100 ~ 240V			
Fine Measurement Mode	1mm: 1.2 sec. (Initial 4 sec.)				Frequency	50/60Hz			
	0.2mm: 2.8 sec. (Initial 5 sec.)				Recharging Time (at +20°C/+68°F)	Battery BT-52QA: 1.8 hours			
Coarse Measurement Mode	0.7 sec. (Initial 3 sec.)				Discharging Time (at +20°C/+68°F)	Battery BT-52QA: 8 hours (in case of full charge)			
Tracking Measurement Mode	0.4 sec. (Initial 3 sec.)				Operating Temperature	+10°C to +40°C (+50°F to 104°F)			
(The initial time will be different by a condition)					Weight	0.5kg (1.1 lbs.)			
Atmospheric Correction Range	-999.9ppm to +999.9ppm, in 0.1ppm increments								
Prism Constant Correction Range	-99.9mm to +99.9mm, in 0.1mm increments								
ANGLE MEASUREMENT									
Method	Absolute Reading								
Detecting System	H: 2 sides V: 1 side		H: 1 side V: 1 side						
Minimum Reading	1" /5"		5" /10"						
	(0.2/1mgon)		(1/2mgon)						
Accuracy*	3"(1mgon)	5"(1.5mgon)	6"(1.8mgon)	9"(2.7mgon)					
Measuring Time	Less than 0.3 sec.								
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)								



STANDARD COMPONENTS

- GTS-230N series (with lens cap) 1 each
- On-board Battery BT-52QA 1 each
- Sun shade 1 each
- Plumb bob set 1 each
- Plastic carrying case 1 each
- Battery charger BC-27 1 each
- Plastic rain cover 1 each
- Took kit with case 1 set

* Standard deviation based on DIN18723

• Designs and specifications herein are subject to change without notice.(E. & O.E.)

Important In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.



ELECTRONIC TOTAL STATION

GTS-230N series



75-1 Hasunuma-cho, Itabashi-ku, Tokyo 174-8580, Japan Phone: (+81)3-3558-2527/2521 Fax: (+81)3-3960-4214 www.topcon.co.jp

TOPCON POSITIONING SYSTEMS, INC.

7400 National Drive, Livermore, CA 94551, U.S.A.
Phone: (+1)925-245-8300 Fax: (+1)925-245-8599 www.topcon.com

TOPCON CALIFORNIA

3380 Industrial Blvd, Suite 105, West Sacramento, CA 95691, U.S.A.
Phone: (+1)916-374-8575 Fax: (+1)916-374-8329

TOPCON EUROPE POSITIONING B.V.

Essebaan 11, 2908 LJ Capelle a/d IJssel, The Netherlands.
Phone: (+31)10-458-5077 Fax: (+31)10-284-4949 www.topcon.eu

IRELAND OFFICE

Unit 69 Western Parkway Business Center
Lower Ballymount Road, Dublin 12, Ireland
Phone: (+353)1460-0021 Fax: (+353)1460-0129

TOPCON DEUTSCHLAND G.m.b.H.

Giesslerallee 31-33, 47877 Willich, Germany
Phone: (+49)2154-8850 Fax: (+49)2154-885111 www.topcon.de

TOPCON S.A.R.L.

89, Rue de Paris 92585 Clichy, Cedex FRANCE
Phone: (+33)1-41069494 Fax: (+33)1-47390251 www.topcon.fr

TOPCON SCANDINAVIA A. B.

Neengatan 2 S-43151 Molndal, SWEDEN
Phone: (+46)31-7109200 Fax: (+46)31-7109249

TOPCON (GREAT BRITAIN) LTD.

Topcon House Kennel Side, Bone Lane Newbury RG 14 2PX U.K.
Phone: (+44)1635-551120 Fax: (+44)1635-551170
www.topcon.co.uk

TOPCON SOUTH ASIA PTE. LTD.

Blk 192 Pandan Loop, #07-01 Patech Industrial Complex, Singapore 128381
Phone: (+65)62780222 Fax: (+65)62733540 www.topcon.com.sg

TOPCON INSTRUMENTS (THAILAND) CO., LTD.

77/162 Srin Sathorn Tower, 37th Fl.,
Krungthongburi Rd., Klongtongjai, Klongsam, Bangkok 10600 Thailand.
Phone: (+66)2-440-1152-7 Fax: (+66)2-440-1158

TOPCON INSTRUMENTS (MALAYSIA) SDN. BHD.

No. D1, (Ground, Lower Ground & 1st Floor) Jalan Excella 2,
Off Jalan Ampang Putra, Taman Ampang Hilir, 55100 Kuala Lumpur, Malaysia.
Phone: (+60)3-42709666 Fax: (+60)3-42709766

TOPCON KOREA CORPORATION

2F Yoseoung Bldg., 1595-3, Seocho-Dong, Seocho-gu, Seoul, 137-876, Korea.
Phone: (+82)2-2055-0321-7 Fax: (+82)2-2055-0319 www.topcon.co.kr

TOPCON CORPORATION BEIJING OFFICE

Building B No.9, Kangding Street
Beijing Economic-Technological Development Area, Beijing, 100176, China
Phone: (+86)10-6780-2799 Fax: (+86)10-6780-2790

TOPCON CORPORATION DUBAI OFFICE

P. O. BOX 293705, Office C-25 (row C-2), Dubai Airport Free Zone,
Dubai, United Arab Emirates
Phone: (+971)4-2995900 Fax: (+971)4-2995901

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Easy operation & Toughness should be Robust!!!

- conventional, compact and robust body
- dust- and waterproof
- 24 key-keyboard and graphical display
- improved operation software
- on-board data collection
- field application program
- new road software

Toughest durability, dust- and waterproof, IP66!

The GTS-230N Series stand up to any weather condition that occurs in the field, giving the great benefit of no experiencing down time. IP66, dust- and waterproof, the GTS-230N Series assures durable performance in the field under all conditions as an "ALL Weather" Total Station. Bad weather is no longer an excuse for lost productivity!

Increased Internal Memory for DATA Storage

The GTS-230N Series has an internal memory to store up to 24,000 points for data collection and lay-out work.

Alphanumeric 24 key-keyboard and graphical display

The GTS-230N has a 24 numeric key-keyboard build in. This 24 key-keyboard makes it easier and quicker to key in codes and other alpha or numeric fields. Besides more flexibility in the keyboard the graphical display on the GTS-230N supports almost any character.

Massive application measurement

Already included in the GTS-230N series, New Road software is added. New Road function automatically calculates a complicated spiral curve and a long distance route only by defining the start point, terminal point and a curvilinear element. Naturally, with on board data collection and field application software, the GTS-230N Series supports different field work by various functions and easy operation.

Long Life Battery : 10hours!

BT-52QA Ni-MH on-board battery allows 10 hours of continuous measurement in the angle/distance mode, and lasts 45 hours on the job for angle measurement only. This long life battery will eliminate the need for multiple batteries. One BT-52QA will be sufficient for most full day surveying work.

