

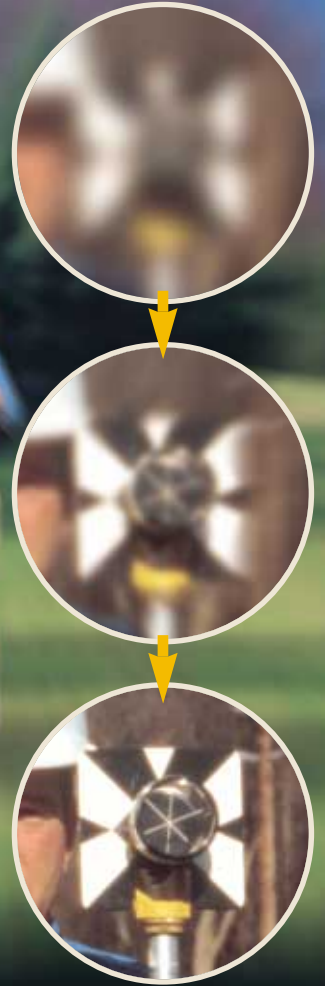
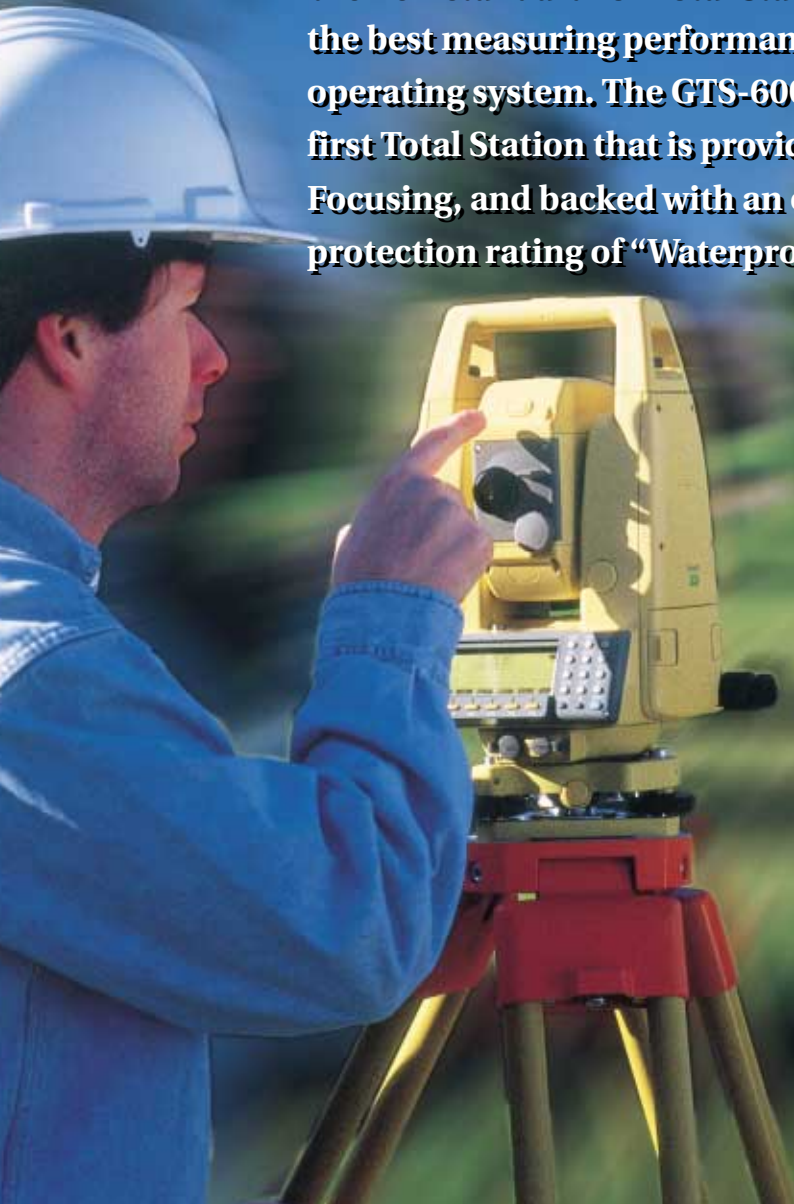
 **ELECTRONIC TOTAL STATION**

# **GTS-600AF/600** series



# CREATING NEW STANDARDS AGAIN TOPCON GTS-600AF/600 SERIES!!

TOPCON is proud to announce the new GTS-600AF/600 series as the new standard for Total Stations with superior features, the best measuring performance and built-in MS-DOS® operating system. The GTS-600AF Series is the world's first Total Station that is provided with Auto Focusing, and backed with an environmental protection rating of "Waterproof IPX-5".



## AUTO FOCUSING FUNCTION (GTS-600AF) WORLD'S FIRST for Total Station

The GTS-600AF Series is the world's first Total Station that is provided with Auto Focusing technology. Just roughly collimate a prism using the sighting scope on the telescope and all you have to do is to press the "AF" function key. Immediately the instrument will search the point and automatically focus on the target prism. The "Auto Focusing Function" is available by a simple keystroke and will increase productivity by eliminating manual focusing time. (Conventional manual focusing is also selectable.)





# Unprecedented features for superior operational ease

## Superior Basic Function for measuring distance & angle

The GTS-600AF/600 series is provided with a measuring distance range of 3,000 meters / 1 prism. As for distance measuring time, data updates at a rate of 1.3 seconds in the fine measurement mode. (0.7 seconds coarse mode and 0.4 seconds tracking mode). This shorter distance measurement time will allow you to increase efficiency and productivity in the field.



### AF function key

After roughly collimating a prism, just press the AF key to get the prism in focus.

### Manual focus knob

## Sophisticated Design

The GTS-600AF/600 series has the sophisticated design for superior operational ease with a large graphic display, alpha/numeric and function key operations and Icon menu. Built-in MS-DOS® and the graphic display make it possible to adapt to various languages. Also new Ni-MH on-board battery system allows its compact size with high capacity.

### Laser Plummet

The laser plummet located in the alidade is standard for the GTS-600AF/600 series. With a clearly visible spot on the ground, you can set up the instrument fast and easy. As an option in place of the laser plummet the GTS-600AF/600 series can have the conventional optical 3x plummet.



## 2MB Capacity for Application Programs

The GTS-600AF/600 series has the program memory capacity of 2MB for various larger application programs. And also the instrument has an internal memory capacity of 320KB, which makes it possible to store the coordinate data of approx. 5,000 points.

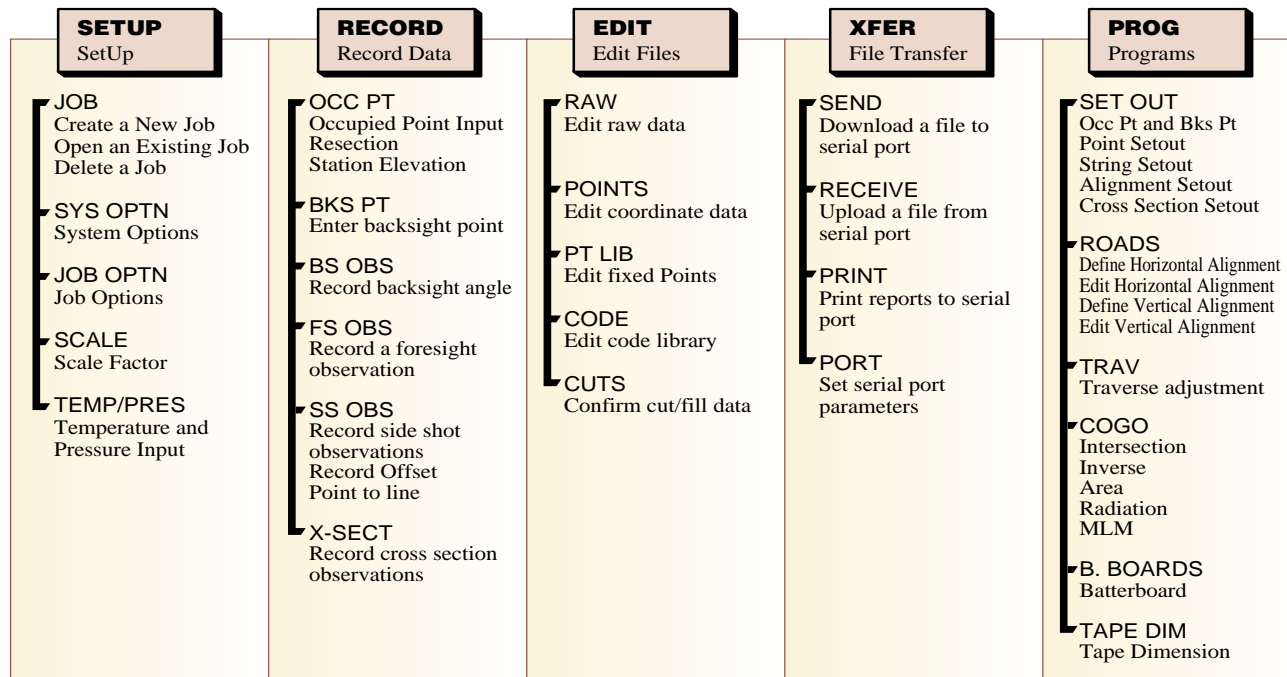


# High Productivity with Standard Survey 600 Program

The Topcon GTS-600AF/600 series has a standard pre-installed basic application program "Standard Survey 600" which takes advantage of the large memory and enhanced graphic display.

## Standard Survey 600 Software Features

### Menu Structure Diagram



## STANDARD COMPONENTS



GTS-600AF/600 series .....	1 each	Silicon cloth.....	1 each
Battery BT-50Q.....	2 each	Plastic rain cover.....	1 each
Battery charger BC-27BR (120V) or BC-27CR (230V).....	1 each	Plumb bob set .....	1 each
Tool kit with case .....	1 set	Lens cap.....	1 each
Plastic carrying case .....	1 each	Instruction manual.....	1 each

## OPTIONAL ACCESSORIES

Trough compass-6



Diagonal eyepiece-10



Solar filter-6



Solar reticle-6





# SUPERB DURABILITY AGAINST ENVIRONMENT-WATERPROOF

The new GTS-600AF/600 Series can stand up to any wet weather condition that can occur in the field, giving the great benefit of not experiencing down time due to inclement weather. Topcon has provided the world's first Auto Focus, waterproof (IPX5) total station with a MS-DOS® operating system.



## Built-in MS-DOS® Operating System

The GTS-600AF/600 Series has an MS-DOS® operating system, which makes it possible to develop or modify application programs for any surveying job. As a result, you can have your own customized instrument suitable for your particular needs.

\* Degree of protection against water for TOPCON's GTS-600AF/600 Series is based on the standard IEC529, defined as "Water projected in jets" against enclosure from any direction shall have no harmful effects. (IPX5)

# SPECIFICATIONS

		GTS-601/AF	GTS-602/AF	GTS-603/AF	GTS-605/AF			GTS-601/AF	GTS-602/AF	GTS-603/AF	GTS-605/AF
<b>Telescope</b>						Compensating range		±3'			
Length		150mm				Correction unit		1" (0.1mgon)			
Objective lens diameter		45mm (EDM: 50mm)				<b>Computer unit</b>					
Magnification		30×				OS		MS-DOS VER.3.22			
Image		Erect				Internal Memory					
Field of view		1°30'				System memory		EEPROM 512KB			
Minimum focusing		1.3m (2.0m: during Auto Focusing)				Main memory		RAM 640KB			
<b>Distance measurement</b>						Data memory		RAM 320KB			
Condition 1						Program memory		EEPROM 512KB			
1 prism		3,000m (9,900ft)				Application program memory		EEPROM 2MB			
3 prisms		4,000m (13,200ft)				Display		Graphics LCD 40 character × 10lines (240 × 80 Dots) w/backlight			
9 prisms		5,000m (16,400ft)				Calendar Clock		Provided			
Condition 2						<b>Others</b>					
1 prism		3,500m (11,500ft)				Instrument height		182mm (7.2 in)			
3 prisms		4,700m (15,400ft)				Level sensitivity					
9 prisms		5,800m (19,000ft)				Circular level		10' / 2mm			
Condition 1: Slight haze with visibility about 20km (12.5 miles) moderate sunlight with light heat shimmer.						Plate level		30" / 2mm			
Condition 2: No haze with visibility about 40km (25 miles), overcast with no heat shimmer.						Laser plummet		Standard			
Accuracy		±(2mm+2ppm · D)m.s.e.				Optical plummet (option)					
Least count in measurement						Magnification		3×			
Fine mode		1mm (0.005ft)/0.2mm (0.001ft)				Focusing range		0.5m to infinity			
Coarse mode		1mm (0.005ft)				Field of view		4°			
Tracking mode		10mm (0.02ft)				Point guide		Standard			
Measurement display		11 digit: max. display ±9999999.9999m				Dimension		343mm (H) × 230mm (W) × 178mm (L) [13.5 (H) × 9.1 (W) × 7.0 (L) in]			
Measuring time						Weight					
Fine mode		1mm: 1.3 sec. (Initial 4 sec.) 0.2mm: 3.1 sec. (Initial 6 sec.)				Instrument (with battery)		600AF: 5.9kg (13.0 lbs.) 600: 5.8 kg (12.8 lbs.)			
Coarse mode		0.7 sec. (Initial 3 sec.)				Plastic carrying case		3.7kg (8.2 lbs.)			
Tracking mode		0.4 sec. (Initial 3 sec.) (The initial time will be different by a condition)				Durability					
<b>Angle measurement</b>						Water protection		IPX-5			
Method		Absolute reading				Operating temperature		-20°C to + 50°C (-4°F to +122°F)			
Horizontal		2 sides				<b>Battery BT-50Q (2 batteries supplied)</b>					
Vertical		2 sides				Output voltage		7.2V			
Minimum reading		0.5"/1" (0.1/0.5mgon)		1"/5" (0.2/1mgon)		Capacity		2.7AH (Ni-MH)			
Accuracy*		1"(0.3mgon)		2"(0.6mgon)		Maximum operating time at +20°C					
Diameter of circle		71mm				Including distance measurement		5 hours × 2 (600AF) 6.5 hours × 2 (600)			
Tangent screw (V, H)		2 speeds		1 speed		Angle measurement only		9 hours × 2 (600AF) 14 hours × 2 (600)			
<b>Tilt correction</b>						Weight		0.3kg (0.7 lbs.)			
Type		Dual axis				<b>Battery charger BC-27BR/27CR</b>					
Method		Liquid type				Input voltage		AC 120V (BC-27BR), 230V (BC-27CR)			
						Frequency		50/60Hz			
						Recharging time (at +20°C)		1.8 hours			
						Operating temperature		+10°C to 40°C (+50°F to 104°F)			
						Weight		0.5kg (1.1 lbs.)			

\*: Standard deviation based on DIN18723

• Designs and specifications herein are subject to change without notice.

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



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