

# SERIE GPT-8200

Electronic Total Station

Auto tracking pulse total station GPT-8200Aseries

The GPT-8200A series is auto tracking total stations of a dual mode type. One station is capable of non-prism range finding and auto tracking, accomplishing all positioning from surveying to instrumentation.

The non-prism mode can comfortably measure distances beyond 1km. Easy observation of off-limits areas such as hazardous areas stricken by disasters and airports.

High-speed auto tracking at 12°/s for instrumentation of moving objects. Powerful in instrumentation of various types in auto tracking and auto calibration.

<Specification>

Model		GPT-8201A	GPT-8202A	GPT-8203A	GPT-8205A
<b>Telescope</b>					
Objective lens diameter		50mm			
Magnification		30 ×			
Image		Erect			
Field of View		1°30'			
Resolving Power		3"			
Minimum Focusing Distance		1.3m			
Focusing Speed		2 speeds	2 speeds	2 speeds	2 speeds
<b>Auto Tracking/ Servo Mechanism</b>					
Max. Rotating Speed		50° / s			
Max. Automatic Tracking Speed		12° / s			
Auto Tracking Range	Prism 2	8m to 800m			
	Prism A3/A3s	10m to 500m			
Drive Range		All range rotating			
Search Range		User definable			
Coarse movement		Shuttle control (in 7 steps)			
Fine movement		Jog Control (Min. 1 sec)			
Collimation Accuracy*1		3" (Standard deviation of repeatability)			
<b>Distance Measurement</b>					
<b>Prism mode</b>					
Measuring Range	Prism 2*2	2 to 7,000m			
Measuring Accuracy		±(2mm+2ppmxD) m.s.e.			
<b>Non-prism</b>					
Measurement Range (White surface)		3 to 120m (Long mode 30 to 1,200m)			
Measuring Accuracy (Diffusing Surface)	3 to 25m 25m to Long mode*3	±(10mm) m.s.e. ±(3mm+2ppmxD*) m.s.e. ±(10mm+10ppmxD*) m.s.e.			
<b>Measuring time</b>					
		0.2mm: 3 sec. (Initial 4 sec) 1mm: 1.2 sec. (Initial 3 sec.) Long mode 1mm: 1.5 to 6 sec.			
<b>Angle Measurement</b>					
Method		Absolute reading			
Horizontal/Vertical		2 sides			
Minimum reading		0.5" /1" (0.1 / 0.5mgon)		1" /5" (0.2 / 1mgon)	
Accuracy**		1" (0.3mgon)	2" (0.6mgon)	3" (1.0mgon)	5" (1.5mgon)
Diameter of circle		71mm			

<b>Tilt Correction</b>	
Type	Dual axis
Method	Liquid type
Compensating range	±4'
Correction unit	1" (0.1mgon)
<b>Computer unit</b>	
OS	MS-DOS® VER.3.22
Internal memory System memory Program memory Main memory Application program & data memory	FEEPROM 512KB FEEPROM 1MB SRAM 640KB FEEPROM 4MB
Display	Graphics LCD 40 characters × 10lines (240 × 80 Dots) w/ backlight
Calendar clock	Provided
Card system (Type I/II)	PC Card Standard 95 Max./32MB
<b>Interface</b>	
Serial I/F	For computer:RS-232C(6 pin) For RC-2II:RS-232C(4 pin)
Parallel I/F	For printer:Centronics Standard (12 pin)
<b>Other</b>	
Instrument height	196mm
Level sensitivity	
Circular level Plate level	10" / 2mm 30" / 2mm
Optical plummet Magnification Focusing range Image	3 × 0.5m to infinity Erect
Tracking indicator	Provided
Dimension	211(L) × 229(W) × 325(H)mm
Weight Instrument(with battery) Plastic Carrying Case	GPT-8000A series:7.6kg 5.4kg
Durability Dust/Water protection Ambient Temperature Range	IP54 -20°C to + 50°C
Laser class	Class 2 (Class II)
<b>Power Source</b>	
On-board battery BT-56Q Output voltage Capacity Maximum operating time (at +20°C) Angle and distance measurement Auto tracking measurement Weight	7.2V 4.0Ah(Ni-MH) Approx. 4.0 hours Approx. 2.5 hours 0.4kg
Battery Charger BC-27BR/27CR Input voltage Frequency Recharging time (at +20°C) Ambient temperature range Weight Discharging function	AC 120V (BC-27BR), 230V (BC-27CR) 50/60Hz 2.5hours +10°C to 40°C 0.4kg Yes

\*1 : The air condition is stable and prism is staying Automatic Collimation/racking accuracy is available only for prism use except for reflector.

\*2 : Sight haze with visibility about 20km moderate sunlight with light heat shimmer.

\*3 : Measurement distance: No more than 500m, When kodak gray card(white surface) is used.

\*D : measuring distance (mm)

\*\* : Standard deviation based on DIN18723