



SURVEY INSTRUMENT

TOPCON®



GTS-230W Series

World's First electronic total station with cable-free wireless operation



ISO 9001:2000
FM 68448

Specifications

	GTS-233W	GTS-235W	GTS-236W	GTS-239W
TELESCOPE				
Length	150mm	150mm	150mm	150mm
Objective lens diameter	45mm(EDM:50mm)	45mm(EDM:50mm)	45mm(EDM:50mm)	45mm(EDM:50mm)
Magnification	30x	30x	30x	30x
Resolving power	2.5"	2.5"	2.5"	2.5"
Minimum focusing distance	1.3m	1.3m	1.3m	1.3m
DISTANCE MEASUREMENT				
1 prism	3,000m	3,000m	3,000m	2,000m
3 prism	4,000m	4,000m	4,000m	2,700m
Accuracy	±(2mm + 2ppm x D)m.s.e.	±(2mm + 2ppm x D)m.s.e.	±(2mm + 2ppm x D)m.s.e.	±(3mm + 3ppm x D)m.s.e.
Measuring time				
Fine mode	1mm:1.2sec.(Initial 4sec.) 0.2mm:2.8sec.(Initial 5sec.)	1mm:1.2sec.(Initial 4sec.) 0.2mm:2.8sec.(Initial 5sec.)	1mm:1.2sec.(Initial 4sec.) 0.2mm:2.8sec.(Initial 5sec.)	1mm:1.2sec.(Initial 4sec.) 0.2mm:2.8sec.(Initial 5sec.)
Coarse mode	0.7sec.(Initial 3sec.)	0.7sec.(Initial 3sec.)	0.7sec.(Initial 3sec.)	0.7sec.(Initial 3sec.)
Tracking mode	0.4sec.(Initial 3sec.)	0.4sec.(Initial 3sec.)	0.4sec.(Initial 3sec.)	0.4sec.(Initial 3sec.)
ANGLE MEASUREMENT				
Method	Absolute encoder reading	Absolute encoder reading	Absolute encoder reading	Absolute encoder reading
Detecting system	H:2 side V:1 side	H:2 side V:1 side	H:1 side V:1 side	H:1 side V:1 side
Minimum reading	1"/5"	1"/5"	1"/5"	5"/10"
Accuracy	3"	5"	6"	9"
TILT CORRECTION				
Tilt sensor	Dual axis	Dual axis	Dual axis	Single axis
Method	Liquid type	Liquid type	Liquid type	Liquid type
Compensating range	±3'	±3'	±3'	±3'
Correction unit	1"	1"	1"	1"
DISPLAY				
Display unit	2 side	Dot matrix graphic LCD 160dot x 64dot 2 side	1 side	1 side
Keyboard	12 keys	12 keys	12 keys	12 keys
OPERATING TIME				
Including distance measurement	10h(Bluetooth ON:8h)	10h(Bluetooth ON:8h)	10h(Bluetooth ON:8h)	10h(Bluetooth ON:8h)
Angle measurement only	45h(Bluetooth ON:25h)	45h(Bluetooth ON:25h)	45h(Bluetooth ON:25h)	45h(Bluetooth ON:25h)
OTHERS				
Bluetooth	Yes	Yes	Yes	Yes
Protection against water and dust	IP66	IP66	IP66	IP66
Data memory	8,000pts.	8,000pts.	8,000pts.	8,000pts.
Ambient temperature range	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C
P.G.	Yes	Yes	Yes	No
Plummet		Laser (optical plummet optional)		



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