

TOTAL STATION TTS105



Brief Introduction

- TTS105 is an electronic/optical instrument mainly applied in construction and civil engineering field. Angles, distances, coordinates and many advanced measurements are accomplished by using trigonometry and triangulation. Downloading and uploading data are available.

Features

- Large and high resolution screen guarantees a clear display
- Measure up to 100m in the reflectorless mode
- Extended internal memory accepts up to 50000 points
- Handy EDM head
- Electronic auto compensator
- Equipped with advanced measurement programs and practical software
- Possibility of red laser centering
- Red laser directing ensures pinpoint accuracy in reflectorless distance measurement
- Easy and direct operation with the alphanumeric keyboard and the function keys
- Long battery life up to 30 hours for angle measurement only
- Rugged, durable, water and dust resistant design

Meas mode

【Meas】			
HA	99° 43' 13"		
HA	120° 09' 12"	P1	
DIST	SHV	HSET	EDM
OSET	CRD	S-O	REC
MLM	RESE	MENU	HT

Status screen

TTS TOTAL STATION	
Ver 2.6	
NO. 000001	
MEAS	MEM
CNFG	

Record mode

REC/Dist. data	
HA	99° 43' 13"
HA	120° 09' 12"
ALL	MODE
OFFS	MEAS

Menu mode

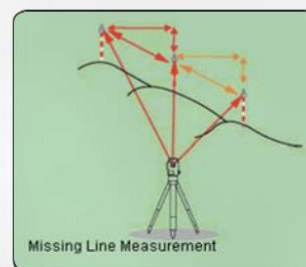
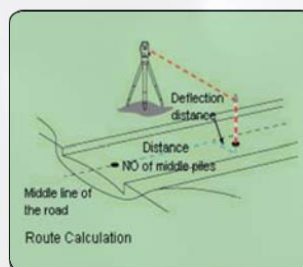
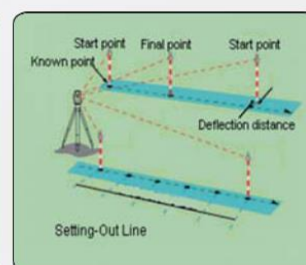
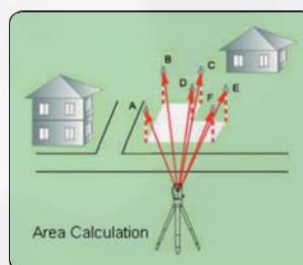
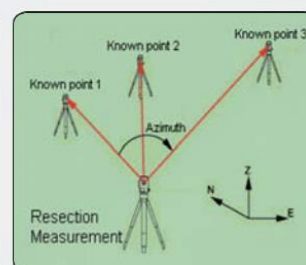
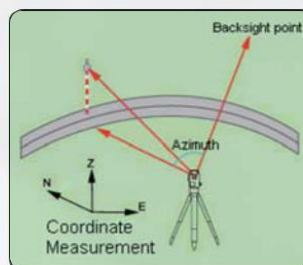
MENU	
1. Coordinate	
2. S-O	
3. Resection	
4. MLM	
5. REM	
6. Area calcul.	
7. Offset	
8. Repetition	
9. S-O line	

Memory mode

MEMORY	
1. Job	
2. Known data	
3. Code	
4. Memory status	
5. Init. memory	

Config mode

CONFIG	
1. Obs. condition	
2. Instr. const	
3. Key function	
4. Unit	



TOTAL STATION TTS105

Technical Specification

ANGLE MEASUREMENT(Hz, V)		
Accuracy	5"	
Method	Grating disk	
Min. reading	1"	
Standard deviation	2"	
Compensation	Vertical axis	
Compensating range	± 3 '	
Magnification	30 ×	
Image	Erect	
Field of view	1 ° 30 ' (2.6%)	
Min. focus	1.5m	
Optical aperture	45mm	
Length of sleeve	150mm	
Resolution	3"	
Distance of circles	71mm	
DISTANCE MEASUREMENT		
Min. reading	1mm	
Reflector:		
Measurement range (Good condition):		
Single prism	4000m	
Triple prism	7000m	
Measurement accuracy	± (3+2ppm·D)mm	
Measurement time:		
Fine measurement mode (Repeat)	About 1.8sec. (first time 2.5sec)	
Tracking measurement mode	About 0.4sec. (first time 1.5sec)	
Atmospheric correction:		
ppm input range	-499ppm—+499ppm (step 1ppm)	
Prism constant correction	-99mm—+99mm (step 1ppm)	
Reflectorless:		
Measurement range (Kodak white)	100m	
Measurement accuracy	± 5mm	
Measurement time:		
Fine measurement mode (Repeat)	About 1.8sec. (first time 3sec)	
Tracking measurement mode	About 0.5sec. (first time 2sec)	
DISPLAY		
Screen type	4-line dot matrix LCD with backlight	
Display unit	Double sides	
PHYSICAL SPECIFICATIONS		
Battery power:		
Voltage	DC7.2V	
Capacity:	Distance and angle measurement	Angle measurement
Lithium battery BDC40L 4.0AH	4.5h	30h
Temperature range:		
Storage temperature	-40℃ ~ +60℃	
Operating temperature	-20℃ ~ +55℃	
Dimension	190mm × 210mm × 350mm	
Net weight	6.0kg	
OTHERS		
Interface	RS232C	
Waterproof /Dustproof protection	IP54	



Standard Delivery

• Main unit	1
• Software	1
• RS232 data cable	1
• Rechargeable battery	2
• Battery charger	1
• Car charger	1
• Tool kit	1
• Dryer	1
• Lint-free cloth	1
• Brush	1
• Screwdriver	1
• Rain protector	1
• Shoulder strap	1
• Instruction manual	1
• TIME certificate	1
• Warranty card	1

