

**LINERTEC**

# LGP-302N / LGP-305N

## WinCE STATION



The screenshot displays the WinCE STATION software interface with the following sections:

- Top Left:** Status bar showing HA 0°00'00", ZA 85°00'00", SD 6.000m, and Page 5. Below it, a map view shows a line with a description "Line No Desc: 5 241 to 242" and a 30m scale bar.
- Top Center:** "Select Measure Mode" menu with options: Temporary (No Store), SideShot, Multi-Set, Check Point, Horizontal Angle Offset, Occupy Point, Sideshot (Auto Store), Resection, Check Backsight, and Vertical Angle Offset.
- Top Right:** "Project: HWY 97" menu with options: Project Manager, Settings, Survey Methods, Survey Tools, Calculations, Map View, Staking, Roads Manager, Data Manager, Import / Export, About, and Exit.
- Bottom Right:** "Import / Export" menu with options: ASCII Coordinate File Import, ASCII Coordinate File Export, DIF File Import, DIF File Export, LandXML Import, LandXML Export (Points and Chains), Export Template, Fieldbook File Export, SDR File Export, Shapefile Export, User Coordinate Systems Import, and User Coordinate Systems Export.

# LGP-302N / LGP-305N WinCE STATION

MODEL		LGP-302N	LGP-305N
<b>Telescope</b>			
Magnification		30 x	
Optical aperture		45mm(EDM45mm)	
Resolving power		3"	
Field of view		1° 30' (2.6%)	
Minimum focus		1.0m	
<b>Focus</b>			
Manual Focus			
<b>Data Processor</b>			
CPU, Clock frequency		S3C2440,400MHz	
OS		Microsoft® Windows® CE.NET 5.0	
Internal memory		SDIO	
		RAM:64MB,ROM:512MB(Nand Flash)	
Interface		RS-232C, USB (USB Mini-B Connector)	
		SD Slot (Max:8GB), Bluetooth(Class2 V2.0)	
Display		3.5 inch - Color LCD, 640×480 pixels *(5) with back light and touch panel function	
Operation language		English, Traditional Chinese, Simplified Chinese.	
Quantity		2	1
Key board		26 keys	
<b>EDM</b>			
Laser class		Class (IIIa) 3R / Class(II) 2 (Selective)	
Distance	Reflectorless	1.5m~550m	
Measurement	Mini prism	1.5m~1200m (1500m) *(1)	
Range	1P	1.5m~4000m (5000m) *(2)	
	3P	200m~5000m (7000m) *(2)	
	Reflector sheet	1.5m~600m (800m) *(3)	
Accuracy	Prism, Reflector sheet	±(2+2ppm×D) mm	
	Reflectorless	±(3+2ppm×D) mm *(4)	
Measuring time	Repeat measure	Normal :Prism, Ref.sheet 2.0sec. (1mm)	
		Normal :Prism, Ref.sheet 1.2sec. (1mm) *Quick mode	
		Track :Prism, Ref.sheet 0.4 sec. (1cm)	
	Initial measure	Normal :Reflectorless 2.3sec. (1mm)	
		Normal :Prism, Ref.sheet 2.5sec. (1mm) *Quick mode	
<b>Application software</b>			
		PowerTopo CE	
<b>Memory</b>	Memory card	2GB (Max) *(6)	
<b>Angle measurement</b>	Method	Absolute Rotary Encoder	
	Accuracy (ISO 17123-3)	2"	5"
	Minimum count	1"	
	Compensator	Dual Axis; Working Range : ± 3'	
Tangent screw		2 speed	
Date clock		Available	
Plummet		Visible Laser, ±0.8 mm (instrument height 1.5m)	
Plate level(electronic)		Plate level (electronic) 30"/1div.	
Circular level		8'/2mm	
Water resistant		IP55	
Ambient temperature		-20°C ~ +50°C / -4°F ~ 122°F (Working range)	
Base		Detachable	
Physical (including Battery)	Instrument Dimension	197(W) x 347(H) x 217(L)mm	
	Weight	6.4kg	
On-board Li-Ion Rechargeable		DC 7.4V	
Operation time (Distance / Angle measure)		Approx. 7 hours	

\*(1), \*(2), \*(3) : Values in ( ) are distance measurement range in good condition  
 \*(4) 1.5 to 350m : ± (3+2ppm×D) mm Over 350 to 550m : ± (D+2ppm×D) mm  
 \*(5) Depending on application software.  
 \*(6) Memory card is not supplied with the instrument.

- The measurement range may vary by measurement conditions.
- Normal conditions: 20km visibility with slight shimmer.
- Good conditions: 40km visibility, overcast, no heat, no shimmer and moderate wind.
- Reflector sheet: PENTAX genuine reflector sheet (5cm x 5cm).
- Quick Mode, which is effective only under Normal mode (1mm) setting, functions with Prism and Reflectorless Sheet. It is incorporated in all X series models and effective up to 500m.
- When Quick Mode is on, the EDM accuracy using prism and reflector sheet is ±(3+2ppm×D)mm. When automatic correction is activated in Quick Mode, the EDM accuracy is ±(3+10ppm×D)mm.
- EDM Measuring time varies according to distance to be measured and conditions of the environment.

- Reflectorless:**
  - The measurement range and accuracy of reflectorless are based on the condition that laser beam is emitted perpendicular to the white side of the Kodak Gray Card.
  - The measurement range may be influenced by the shape of the target and its environment.
  - The measurement range at TRACK mode is over 5m.
  - It takes time, longer than usual, to measure the distance exceeding 200m or to measure the distance to the object that is hard to measure.
  - The maximum distance that can be shown on the display is 372m in the non-prism measurement mode.
  - The measurement range, accuracy of distance measurement and time required to measure may be influenced by the shape, size of surface area and reflection lateral the target and its environment.

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The CE marking means that the product complies with the requirements of the EC directive for safety.



**DANGER**

LASER RADIATION - DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENT INTO SUNLIGHT  
 620-690 nm/0.25mW max.  
 CLASS IIIa LASER PRODUCT  
 Laserclass IIIa, conform FDA 21 CFR Ch. 1 § 1040

**CAUTION**

LASER RADIATION - DO NOT STARE INTO BEAM  
 620-690 nm/0.25mW max.  
 CLASS II LASER PRODUCT  
 Laserclass II, conform FDA 21 CFR Ch. 1 § 1040