

INSTRUMENTATION

GDD
INC.

THE CHAIN LEVEL

Accurate Elevation Profiles
Horizontal Chaining
WITHOUT VISUAL CONTACT



The GDD Chain Level* measures elevation differences without visual contact. The instrument consists of two pressure transducers connected by a flexible chaining cable filled with liquid, and a digital readout meter. A sensor averages the temperature inside the cable, and its output compensates for the density variations of the fluid so as to allow a high-precision reading under any outside temperature.

The sensor rods at each extremity of the cable are placed on the points to be measured. The digital readings of the difference in elevation — horizontal distance — slope — slope distance are available instantly at the touch of a corresponding button.

The new point is then positioned exactly with the chaining cable and the front operator is ready to move on to the next station, pulling the cable along behind him.

Fields of application

- Topographic surveys and profiles, especially in wooded and/or hilly areas
- Seismic surveys (reflection and refraction)
- Gravity surveys
- Geological and drill hole surveys, etc.
- Volume calculations of road cross sections
- Contours of hydroelectric flood basins

Advantages

- No visual contact needed between points to be measured
- One reading measures up to a 15-meter or 50-foot difference in elevation
- Saves on line cutting and reduces ecological damage
- Is at least twice as fast as an optical level in open areas
- Many times faster than an optical level in wooded and/or hilly areas
- Can save its purchase price in a few days of operation

* Formerly GDD Electronic Level

Specifications* MODEL-C

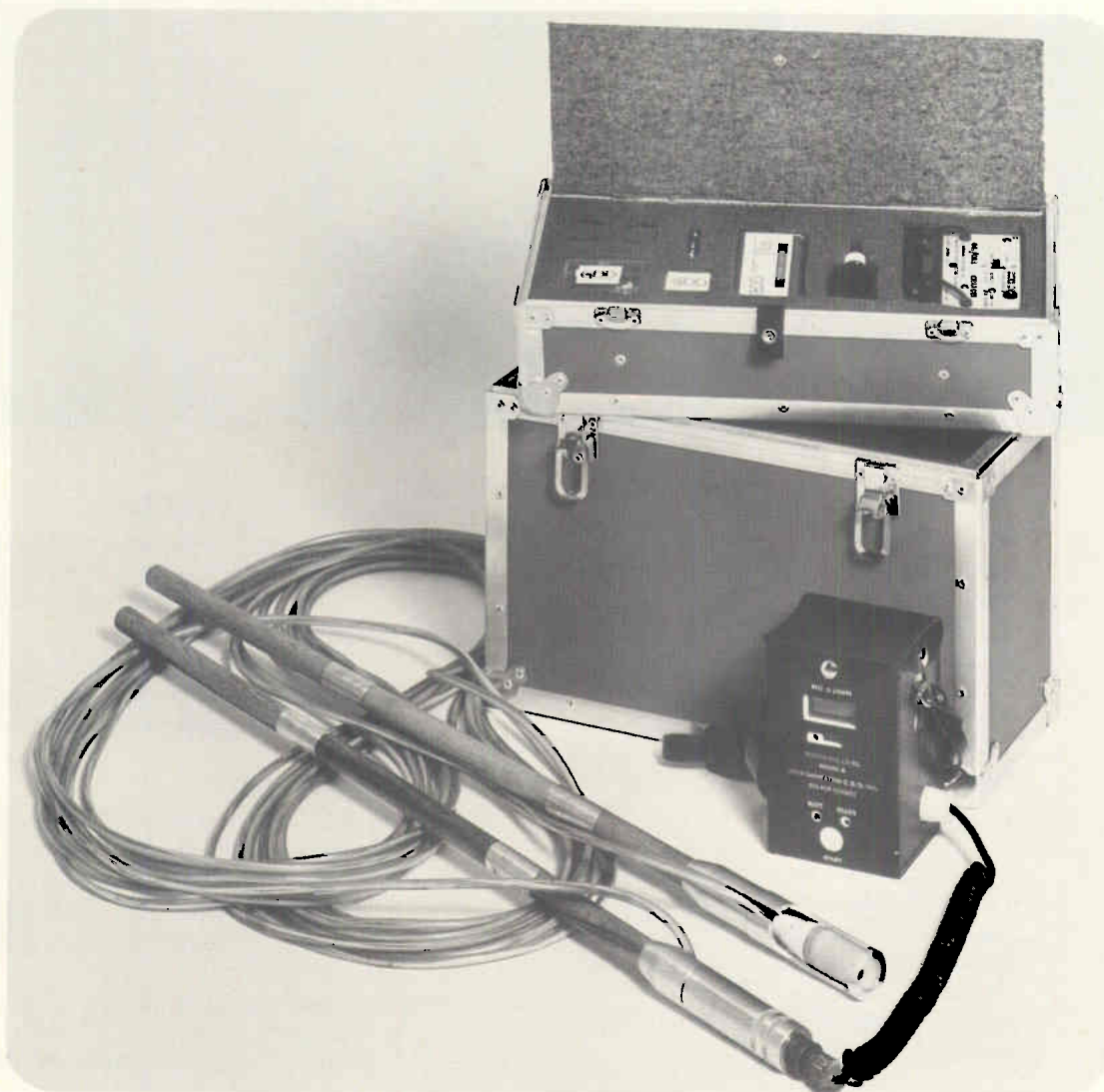
Measurement range:	± 15 meters (50 ft.)
Numerical readout:	5 figures (L.C.D.)
Reading resolution:	2 mm (0.01 ft.)
Absolute accuracy between 2 stations:	± 0.5 cm (0.02 ft.)
Typical closure error (sigma) for 1 Km traverses (3/4 mile):	< 5 cm (2 in.)
Calibration stability:	< 0.2% of the reading
Size:	10 x 10 x 20 cm (4 x 4 x 8 in.)
Weight: Instrument	2.2 kg (5 lbs.)
cable	2.0 kg (4.5 lbs)/30 meters (100 ft.)
Length of cable:	7.5 m to 60 m (25 to 200 ft.)
Tested temperature range:	- 45°C ¹ to 45°C (- 50°F ¹ to 120°F)
Battery supply:	Rechargeable 6V Gell Cell Battery 12 hour battery life An external battery can also be used.

Warranty

Instrumentation GDD Inc. offers a one-year guarantee on the readout meter and three months on the tube.

¹ with optional winter case

* Preliminary design specifications



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