

Prism Constants



Leica / Wild GPH1 + GRP1
circular prism



Leica GMP111
Mini circular prism



Topcon 360°

Leica GRZ4 360°



The prism constant is a distance offset that needs to be applied to measurements to get the correct distance. The prism constant is entered into total station settings. Trimble, Sokkia, Topcon, Pentax, Foif and Nikon use absolute offsets. Leica references the offsets to their “standard” prisms, the GPH1, GPR121 and GPR111.
Leica offset = Absolute offset + 34.4 mm

	type	Absolute offset (Non-Leica instruments)	Leica offset (for Leica instruments)
Leica / Wild GPR1	circular	-34.4 mm	0 mm
Leica GRZ4	360	-11.3 mm	+23.1 mm
Topcon	360	-7 mm	+ 27.4 mm
Leica GMP 111	mini circular	-16.9 mm	+17.5 mm