

Auto Optical Levels (Dumpy)

28 & 32 x Magnification

Professional automatic optical levels (also known as dumpy levels) are built for the construction site and general survey tasks. The magnetic compensator gives greater levelling stability, they are quick to set up and easy to use. Commonly used with a dome top tripod for greater flexibility and available in 28x & 32x magnification.



Technical Specification	LAR28	LAR32
Standard deviation 1km	1.5mm	1.0mm
Magnification	28 x	32 x
Horizontal circle	360° graduations	360° graduations
Compensator	Magnetic damping	Magnetic damping
Objective aperture	34mm	34mm
Weight	1.8kg	1.8kg
Warranty	3 Years	3 Years





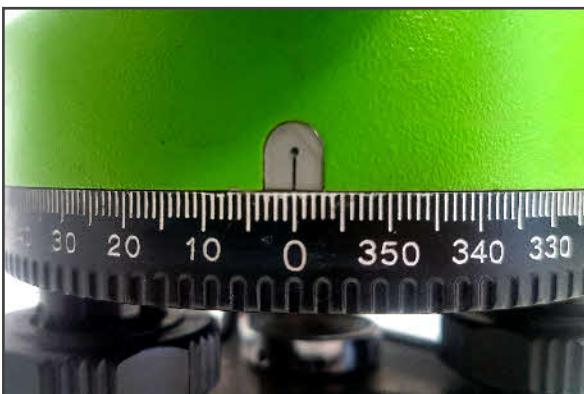
Visual Targeting Arrow

Mounted on the top of the optical level for easy visual targeting. Often focusing on the desired target or staff can be a difficult task at a long distance, the visual targeting arrow makes this easier to position the level before focusing on the point of focus.



Mirrored Levelling Bubble

The top mounted levelling bubble is an essential part of the optical level set up process to ensure the level is mounted flat on the tripod. The Imex optical level range features a 90 degree mirrored bubble for easy levelling, especially on an elevated tripod position.



Engraved Degree Markings

Full 360 degree rotation around the optical level base allows for accurate site set out and survey. With fully engraved markings, the optical level can be micro adjusted to the exact degree of angle required for perfect levelling every time.

Setting Up an Optical Level

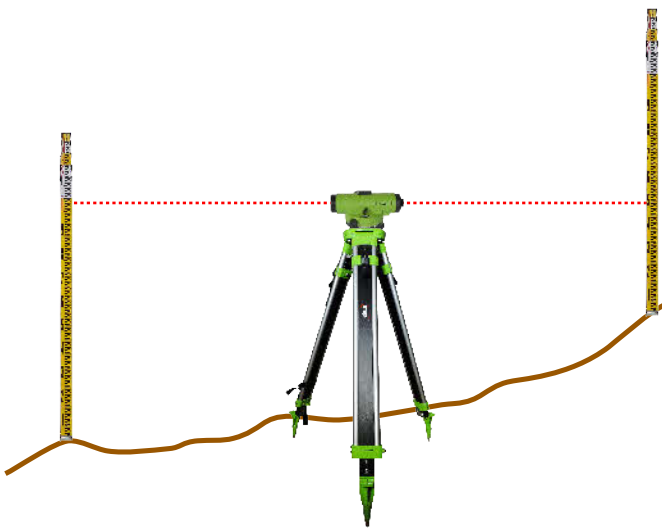
When operating a dumpy level, you must ensure that the level is securely placed, preferably on a tripod (dome or flat). Using the 3 levelling legs/screws the user can micro adjust the optical level so that it is sitting perfectly flat on the tripod. This can be checked against the levelling bubble situated on the top of the level. Next you must align the instrument by looking through the eyepiece and micro adjusting the level on its base. The focus of the level can be adjusted to your visual point of measure using the focus adjust wheel on the side of the level. The Imex range of optical levels all come pre calibrated and are self levelling for accurate site readings every time.



Horizontal and vertical cross-hairs allow for vertical and horizontal alignment.

Using an Optical Level

Optical levels are a reliable, simple and effective tool commonly used across the construction industry for multiple levelling, grading and surveying tasks. The operator must look through the optical eyepiece to measure against a staff or tape measure placed at the point being measured. This site levelling technique is particularly useful to surveyors during site surveys as well as a whole host of other uses within the construction industry. The Imex LAR32 optical level offers 32x magnification giving users the flexibility of an extended visible working range.



Sighting is done with an assistant surveyor who holds a graduated staff vertical at the point under measurement. The surveyor rotates the telescope until the graduated staff is in the cross hairs and records the reading. This is repeated for all sightings from that datum. Should the instrument be moved to another position within sighting distance, it is re-levelled, and a sighting taken of a known level in the previous survey. This relates any new levels to the previous levels. Using a known datum point, ground level readings can be taken relative to the datum point across a site to determine grade, height etc.

Buying Options

Unit Only: **012-ILAR28**
012-ILAR32

Sold without the tripod and staff. Includes the level, plumb line, calibration pin and hard carry case.



Optical Level Kit: **012-ILAR28S**
012-ILAR32S

Sold with the tripod and staff. Includes the level, plumb line, calibration pin and hard carry case.

