### **Automatic Level**

# Easy-to-use Optical Auto-levels











- Choice of magnetic or air dampened automatic compensators
- Double-sided, continuous horizontal tangent drives
- Stadia lines for simple distance measurement
- Convenient horizontal angle measurement
- Built in bubble mirror and sighting guide
- Metal housing for increased durability

- Water resistant construction
- Includes hardshell case

Air dampened model shown

- Two-person leveling across the job site
- Leveling forms and footers
- Checking elevation
- Measuring cut and fill

#### AL<sub>20</sub>M

Part No.	Power/Damp	Tripod	Rod	
AL20M	20X / Magnetic	No	No	
AL20M-1	20X / Magnetic	5301-27-BLK-SP	GR151	
AL20M-2	20X / Magnetic	5301-27-BLK-SP	GR152	
AL20M-3	20X / Magnetic	5301-27-BLK-SP	GR153	

#### AL24A, AL24M

Part No.	Power/Damp	Tripod	Rod	
AL24A	24X / Air	No	No	
AL24M	24X / Magnetic	No	No	
AL24A-1	24X / Air	5301-27-BLK-SP	GR151	
AL24M-1	24X / Magnetic	5301-27-BLK-SP	GR151	
AL24A-2	24X / Air	5301-27-BLK-SP	GR152	
AL24M-2	24X / Magnetic	5301-27-BLK-SP	GR152	
AL24A-3	24X / Air	5301-27-BLK-SP	GR153	
AL24M-3	24X / Magnetic	5301-27-BLK-SP	GR153	

#### AL28M

Part No.	Power/Damp	Tripod	Rod	
AL28M	28X / Magnetic	No	No	
AL28M-1	28X / Magnetic	5301-27-BLK-SP	GR151	
AL28M-2	28X / Magnetic	5301-27-BLK-SP	GR152	
AL28M-3	28X / Magnetic	5301-27-BLK-SP	GR153	

#### AL32A

Part No.	Power/Damp	Iripod	Rod	
AL32A	32X / Air	No	No	



## **SPECIFICATIONS**

Automatic Levels							
	AL20M	AL24A	AL24M	AL28M	AL32A		
Magnification	20×	24	4×	28x	32x		
Accuracy	±2.5 mm*	±2.0	±2.0 mm* ±1.5 mm*				
Aperture	30 mm 36 mm						
Shortest focus		0.6 m					
Compensator dampening	Magnetic	Air Magnetic Air					
Warranty	2 Year instant exchange						
*Note: Standard deviation according to DIN 18723 on one kilometer of double leveling							

DET-2											
Telescope		Optical Plummet		Angle Measuring System		Vials		Button Functions		Other Specs	
Image	Erect	Image	Erect	Minimum reading	1" or 5"	Tubular	30"/2 mm	ON / OFF	Power	Dust/Water	IP-54
Mag.	30X	Mag.	3X	Precision	2"	Circular	8'/2 mm	R	Backlight / Illumination on / off	Operating temperature	-20°C to +50°C
Aperture	45 mm	Angle of view	5°	Units	Deg / mil / gon / V%			HOLD	Angle hold	Size - instrument	164 x 154 x 340 mm
Focus distance	1.45 m to ∞	Focusing range	0.5 m ~ ∞	Display	Dual, Large Character LCD tilt sensor			R/L	Clockwise / Counterclock- wise measurement	Weight - instrument	4.5 kg
Field of view	1° 30′	Reticle type	Crosshair	Auto compensation	User Set On / Off ±3' Range			OSET	Zero reset of horizontal angle	Warranty	2 Year
Stadia Ratio / constant	100 / 0							V%	Convert vertical degrees to %		

QM Series Quick Measure Lasers							
Specification	QM10 QM20 QM55						
Range	30 m (100 ft)	50 m (	(165 ft)				
Accuracy	± 2.0 mm	± 1.5 mm (± 1/16 in)					
Units of measure	m, ft, in, ft-in						
Automatic shut off	10 m	3 minutes					
Battery life	5000+ measures						
Power supply	2 x AAA 1.5V						
Drop performance	Λ	1.5 m (5 ft)					
Dust & Water resistance	IP	IP54					
Laser type / power	620-690nm visi	635nm visible red / < 1 mW					
Dimensions	43 x 24 x 110 mm (1.7 x 0.9 x 4.3 in) 48 x 24 x 116 mm (1.9 x 0.9 x 4.6 in)		52 x 28 x 125 mm (2.0 x 1.1 x 4.9 in)				
Weight with batteries	74 g (2.6 oz)	180 g (6.3 oz)					
Weight with batteries	1 Year 3 Years						