

## Specifications

## Rotating Laser HV-3/H-3



|                             |                                                                                                   |                                                    |                               |              |
|-----------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------|--------------|
| Item Code                   | 70821, 70817                                                                                      | 70820, 70816                                       | 70819, 70807                  | 70818, 70806 |
| Type                        | HV-3 Green                                                                                        | HV-3 Red                                           | H-3 Green                     | H-3 Red      |
| Light Source                | Visible laser diode                                                                               |                                                    |                               |              |
| Output                      | Less than 4.5 mW (Class3R JIS C6802:2018)                                                         |                                                    |                               |              |
| Wave Length                 | 515 - 530 nm(Green),<br>Ground marking point 645 - 655 nm(Red)                                    | 630 - 640 nm,<br>Ground marking point 645 - 655 nm | 515 - 530 nm                  | 630 - 642 nm |
| Measuring Range             | Diameter 800 m (radius 400 m)                                                                     |                                                    | Diameter 400 m (radius 200 m) |              |
| Horizontal Accuracy         | ±10 mm per 100 m                                                                                  |                                                    |                               |              |
| Vertical Accuracy           | ±15 mm per 100 m                                                                                  |                                                    | —                             |              |
| Automatic Leveling Range    | ±5°                                                                                               |                                                    |                               |              |
| Tilt Alarm                  | Rotating head stops when auto-leveling range is exceeded, and low battery warning lamp lights up. |                                                    |                               |              |
| Rotation Speed              | 600/300/150/0 rpm                                                                                 |                                                    | 600 rpm                       |              |
| Scan Width                  | 15°/50°/100°/220°                                                                                 |                                                    | —                             |              |
| Power Source                | Removable lithium-ion battery, AC adapter                                                         |                                                    |                               |              |
| Battery Capacity            | 3,200 mAh                                                                                         |                                                    |                               |              |
| Operating Temperature Range | −10 - 50℃                                                                                         | −10 - 45℃                                          | −10 - 50℃                     | −10 - 45℃    |
| Continuous Usage Time       | 23 hrs                                                                                            | 30 hrs                                             | 24 hrs                        | 35 hrs       |
| Battery Usage Alarm         | Low battery warning light flashes during use                                                      |                                                    |                               |              |
| Dustproof/Waterproof*       | IP66                                                                                              |                                                    |                               |              |
| Tripod Screw                | 5/8 inch                                                                                          |                                                    |                               |              |

\*Dustproof performance: No dust can penetrate. Waterproof performance: Not adversely affected by powerful water jets from any direction.

### Remote Control (HV-3 accessory)

| Infrared Radiation Distance | Max. 20 m                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------|
| Power Source                | 2x AAA Alkaline batteries<br>(Batteries included are for trial use only and may not last as long) |
| Body Size                   | 132 × 44 × 23 mm                                                                                  |
| Weight                      | 60 g (including batteries)                                                                        |

## Auto Level



**Magnification**  
32x  
**Waterproof**  
IPX4  
77055



**Magnification**  
28x  
**Waterproof**  
IPX4  
76901



**Magnification**  
24x  
**Waterproof**  
IPX4  
76653



77055



76901, 76653



●Parts are listed from p.274

| Item Code | Description        | Body Size (mm)  | Weight (g) | JAN Code        | Packing Unit | Package |
|-----------|--------------------|-----------------|------------|-----------------|--------------|---------|
| 77055     | SA-32A with Tripod | CAL 209×130×142 | 1,308      | 4 960910 770553 | 1            |         |
| 76901     | SA-28A with Tripod | CAL 208×130×135 | 1,247      | 4 960910 769014 | 1            |         |
| 76653     | SA-24A with Tripod | CAL 208×130×135 | 1,241      | 4 960910 766532 | 1            |         |

### Features

- Waterproof structure (IPX4)
- Comes with a domed-head tripod
- Equipped with a collimator to easily find the target
- Horizontal angle can be read in 1° increments with horizontal scale

### Use

- For leveling in civil engineering and construction work

### Specifications

| Item Code                      | 77055                                                                                | 76901   | 76653   |
|--------------------------------|--------------------------------------------------------------------------------------|---------|---------|
| Standard Deviation (km)        | ±1.0 mm                                                                              | ±1.5 mm | ±2.0 mm |
| Telescope                      | Correct image                                                                        |         |         |
| Magnification                  | 32X                                                                                  | 28X     | 24X     |
| Effective Diameter             | 40 mm                                                                                | 30 mm   | 30 mm   |
| Field Angle                    | 1°30'                                                                                | 1°20'   | 1°20'   |
| Shortest Focus Distance        | 0.5 m                                                                                | 0.6 m   | 0.6 m   |
| Stadia Multiplier              | 100                                                                                  |         |         |
| Stadia Addend                  | 0                                                                                    |         |         |
| Sensitivity of Vial            | 8/2 mm                                                                               |         |         |
| Minimum Horizontal Measurement | 1°                                                                                   |         |         |
| Auto Leveling System           | Magnet damper                                                                        |         |         |
| Auto Leveling Range            | ±15°                                                                                 |         |         |
| Repeat Precision               | 0.3°                                                                                 | 0.5°    | 0.5°    |
| Tripod Screw                   | W 5/8 inch                                                                           |         |         |
| Bottom Plate Type              | Plane/ spherical                                                                     |         |         |
| Waterproof                     | IPX4*                                                                                |         |         |
| Accessories                    | Plumb bob, hexagonal wrench, correction needle, Tripod Spherical Head, carrying case |         |         |

\*IPX4 Waterproof: Protected from water splash from any direction