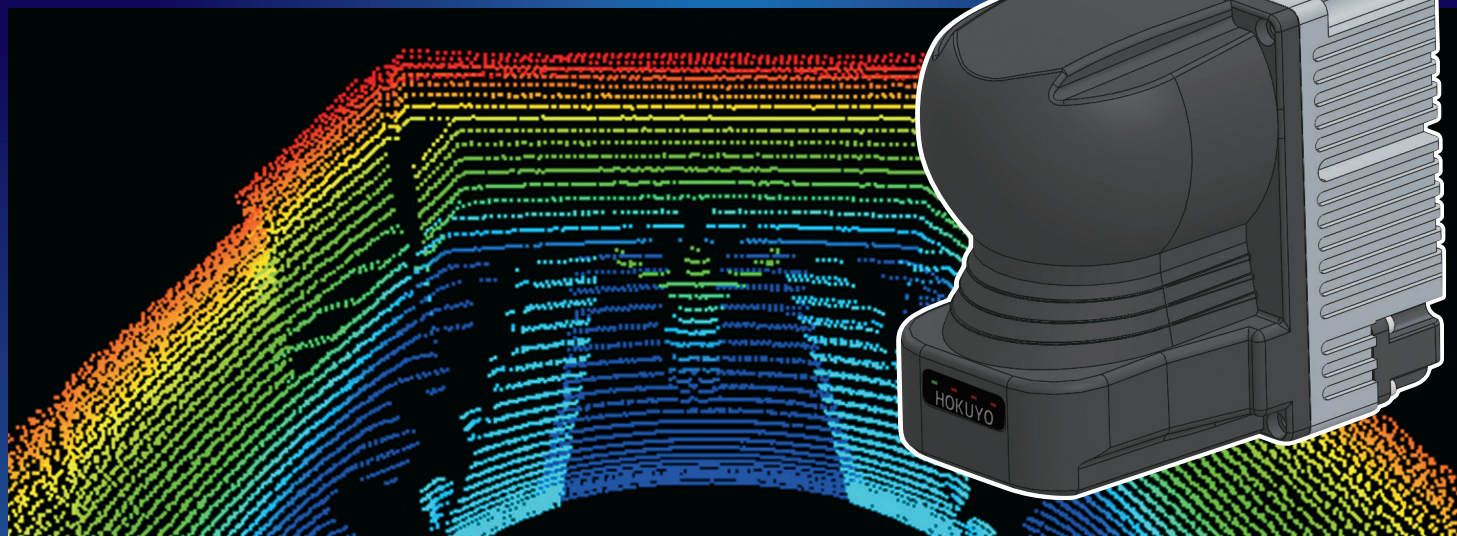


# YVT-35LX

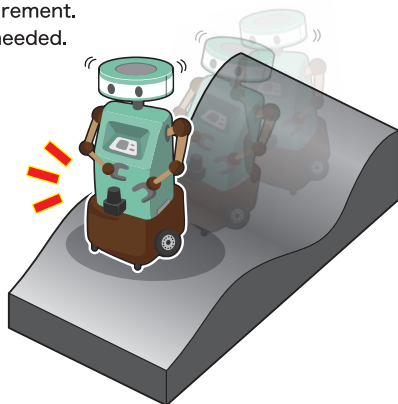
## 3D Laser scanner



- 40° vertical scanning range
- 40% increase in detection distance
- Suitable 3D solution for mobile robot

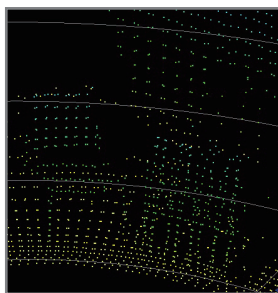
### ▶ Built-in IMU

Attitude data from IMU can be used for correction of 3D measurement. Time correction is not needed.

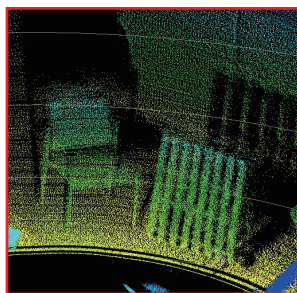


### ▶ HD (High-Density) mode added

High-density point cloud makes it easy for environment recognition



Previous Performance



HD mode

### ▶ Specifications

| Model                   | YVT-35LX                                                                                             |
|-------------------------|------------------------------------------------------------------------------------------------------|
| Detection range         | Front: 0.3-35m (white paper),<br>right and left side: 0.3-14m (white paper)                          |
| Angular range           | Horizontal: 210°, Vertical: 40°                                                                      |
| Scanning speed          | 20Hz                                                                                                 |
| Repeated accuracy       | ±50mm (white paper, below 15m)                                                                       |
| Interface               | Horizontal: 2-20 times<br>HD Mode: Horizontal: 20 times, Vertical: 10 times                          |
| Data spots (Resolution) | More than 2,590 spots (None interlace, 20fps)<br>More than 518,000 spots (Interlace HD Mode, 0.1fps) |
| Number of Echoes        | Max.4                                                                                                |
| IMU data                | Acceleration and angular velocity                                                                    |
| Interface               | Measurement data: Ethernet<br>I/O: PPS input and scanning sync. output                               |
| Protective structure    | IP67                                                                                                 |
| Ambient illuminance     | Sunlight below 100,000lx                                                                             |
| Vibration resistance    | 10G in X, Y and Z directions                                                                         |
| Sound level             | Below 59dB                                                                                           |
| Size                    | 70mm × 106mm × 95mm                                                                                  |
| Weight                  | Below 650g                                                                                           |

Note: The specifications are subject to change without notice

### ▶ PPS (Pulse Per Second) input

When GPS is applied in a system, the PPS signal can be used to reset sensor's internal time stamp and eventually correct the accumulated error.

### ▶ Synchronous Output

This is the timing signal of the position of internal optical scanner. The signal can be used to synchronize external devices.



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