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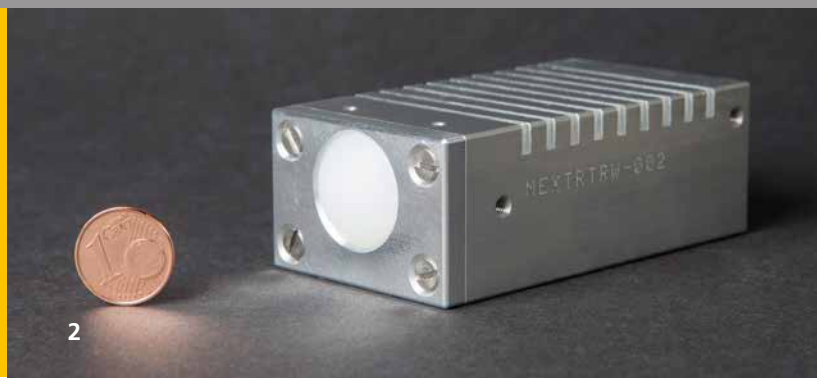

1 *The W-band radar provides reliable monitoring of container ports even in fog.*

2 *The W-band radar module measures only 78 x 42 x 28 mm³ .*

COMPACT W-BAND RADAR

The frequency range of 75 –110 GHz (W-band) is ideal for radars to detect small objects from a distance, even in highly reduced visibility. Due to the production costs and device size, radar systems have so far been used only to a limited extent. A research group has now developed a compact and modular W-band radar for diverse and flexible use.

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Features

- High range of coverage and accuracy
- Phase-locked loop for chirp generation with frequency multiplication
- GaAs-based integrated circuits on cost-effective polymer substrate
- Broadband antenna with dielectric lens
- Integrated signal processing and object analysis

Applications

- **Industrial sensors:** precise distance measurements under limited visibility conditions
- **Logistics:** monitoring of container ports
- **Medical technology:** intelligent medical devices
- **Air safety:** landing aid for helicopters
- **Transportation:** railway technology

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