

Intrusion detection



New technology on dual motion detectors

False alarm immunity like never before



Revealing a cutting-edge technology on the Aritech dual motion detection line-up

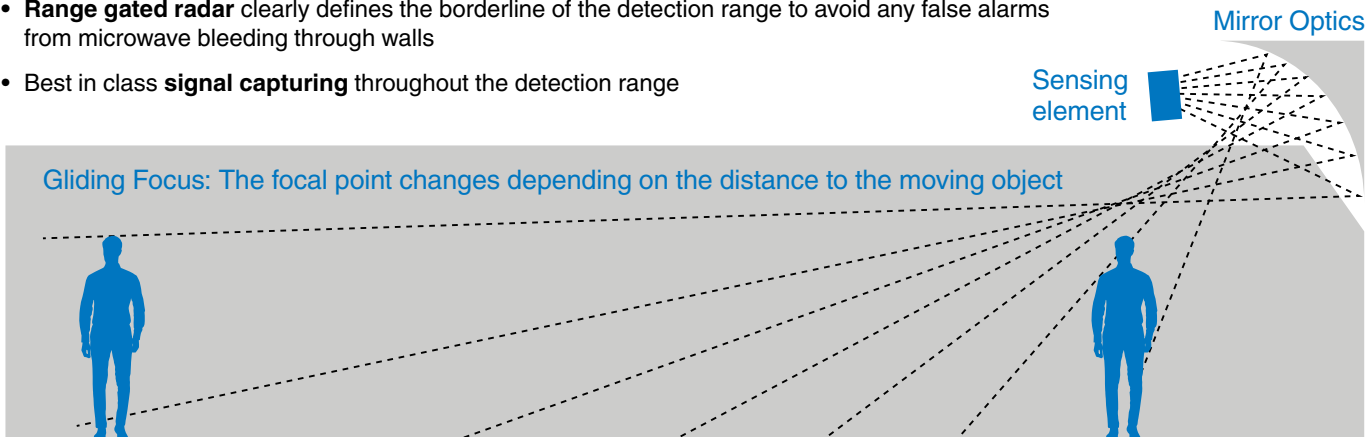
Going from good to great! The dual motion detectors now include a ground-breaking technology to answer the biggest challenge of our users: false alarm detection.



Today: advanced technology for a leading brand

The Dual Motion Sensors have been the corner stones of Aritech thanks to the advanced technology which made them unique on the market for over 40 years:

- **Mirror optics with gliding focus** eliminates the effect of distance to the moving object
- **Anti-Masking** provides a superior protection against sabotage techniques such as spraying, covering, and device penetration
- **Range gated radar** clearly defines the borderline of the detection range to avoid any false alarms from microwave bleeding through walls
- Best in class **signal capturing** throughout the detection range



New technology to move from good to great: digital pyro and neural algorithm

New technology on the hardware: digital pyro

The digital pyro detects temperature fluctuations with a high-degree of precision, allowing for a reduction of electrical interferences and a more accurate detection.

New technology on the software: neural algorithm

Developed by our engineering team, the neural algorithm is a code that allows the software to learn signals to adapt the response accordingly.

Both innovations result in a better quality of signals and stronger false alarm immunity, while the products remain unchanged on the outside.



Proven results

Numerous tests have been conducted on the detectors to make sure the Aritech Dual Motion Sensors provide a false alarm immunity like never before.



The neural algorithm:

- A total of **18 parameters** are calculated and evaluated – these parameters include vector rotation, vector speed, peak-to-peak maximum duration, event length, and more
- The tests are done to evaluate both false and true alarms
- Our tests include more than 8,000 test scenarios in the database
- We have more than 16,000 signals recorded in our database
- The results show a reliability of 99.5% in terms of false alarm immunity: a game changing performance

The digital pyro versus analog pyro:

- Alarm immunity improvements: digital pyro is more immune to electrical interferences (30% reduction), signals are more stable and provide less variations of results
- Digitized signals: higher signal-to-noise ratio, the signal stands out from noise

Benefits of Dual Motion Sensors new technology



INNOVATIVE: a new technology

- Created by our engineering team, the neural algorithm is an innovation that stands out and represents a major step forward in the detection world
- Digital pyro and neural algorithm: better quality of signals and advanced processing — improved detection, extreme low rate of unwanted alarms
- Because Aritech means quality, our products are constantly improving — no cost added for an improved technolog



RELIABLE: tests and field trials success

- Tests to prove it: 99.5% reliability of the detected alarms
- Improved detection for fast and slow movements



AGILE: software-based technology

- The software can be continuously improved for our new generation sensors, to remain at the top of the market

Bringing value to our customers and users

Target Users	Correctional Facilities	Use Cases	Escape preventions	The detector can be positioned to look across windows, doors, or the entire length of the property Escape detection at a very early stage
	Critical Infrastructures		Risk of attack, vandalism, and theft prevention	Protects sites from intrusions and avoid liabilities (water treatment, oil, & gas)
	Manufacturing and Logistics		Burglary and theft prevention	Detects presence of movement in logistic centers and keeps unauthorized personnel out of restricted areas
	Residential		Keep home and family safe	Detectors can be set up on all corners of the property to sound off alarms and trigger lights if an unwanted presence comes too close to the front porch
	Retail		Automation	Activate lights when entering a room Keep unauthorized personnel out of restricted areas

Dual Motion Sensors models

Old SKU	New SKU (same design)	Description	Digital Pyro?	Neural Algorithm?	Certification
DD1012 DD1012-D	DD1012-N	12 m, Dual technology motion sensor	YES - Digital pyro for 1 channel	NO - tuned legacy algorithm	CE, EN Grade 2, NFA2P, Incert, VdS Class B
DD1012AM	DD1012AM-N	12 m, Dual technology motion sensor, Anti-Mask	YES - Digital pyro for 1 channel	NO - tuned legacy algorithm	CE, EN Grade 3, NFA2P, Incert
DD1012AM-D	DD1012AM-D-N	12 m, Dual technology motion sensor, Anti-Mask, VDS	YES - Digital pyro for 1 channel	NO - tuned legacy algorithm	CE, EN Grade 3, VdS Class C
DD1012PI	DD1012PI-N	12m, Dual technology motion sensor, Pet immune	YES - Digital pyro for 1 channel	NO - tuned legacy algorithm	CE, EN Grade 2, NFA2P, Incert
DDV1016 DDV1016-D	DDV1016-N	16 m, Dual technology motion sensor Vector	YES - Digital pyro for 2 channels	YES - Neural algorithm	CE, EN Grade 2, VdS Class B, Incert
DDV1016AM	DDV1016AM-N	16 m, Dual technology motion sensor Vector, Anti-Mask	YES - Digital pyro for 2 channels	YES - Neural algorithm	CE, EN Grade 3, NFA2P, Incert
DDV1016AM-D	DDV1016AM-D-N	16 m, Dual technology motion sensor Vector, Anti-Mask, VDS	YES - Digital pyro for 2 channels	YES - Neural algorithm	CE, EN Grade 3, VdS Class C
DDV1016AM-D-B	DDV1016AM-D-B-N	16 m, Dual technology motion sensor Vector, Anti-Mask, VDS, Black	YES - Digital pyro for 2 channels	YES - Neural algorithm	CE, EN Grade 3, VdS Class C

To know more about Aritech Dual Motion Sensors, please visit [firesecurityproducts.com](https://www.firesecurityproducts.com)