

# AGIL<sup>®</sup> Sense MICROWAVE SENSOR MODULES



# ENGINEERED FOR RELIABILITY Driving the Future with AGIL®

The rise in demand for smart sensors that enable efficient data collection for better operations are shaping the future of smart cities. We are obsessed with a deep sense of purpose to address a range of evolving challenges allowing cities to effectively monitor and manage a range of community services, whether it is effectively monitoring traffic and transportation systems, optimising waste management processes, or improving intruder detection to create smarter and safer living environments.

To address customers' demand for smart and environmentally friendly sensors, technologies to enhance detection processes and improve operational efficiency while providing energy-efficient outcomes drive our solutioning approach. AGIL, our unique solutioning approach, acts as the heart of our conscious innovation to constantly seek and challenge incisive, inventive and intuitive solutions to help solve real-world problems. With emerging technology and experiential thinking, we have effected over 100 large-scale security projects across over 22 cities.

### Industry Leader in Microwave Sensor Technology

As leading brand, AGIL microwave sensor modules are designed to be highly sensitive, reliable and responsive over an extended range, meeting all your speed, distance and occupancy-sensing requirements.

Our state-of-the-art production facilities are certified with the highest standards of quality, safety and consistency for advanced CAD, test and manufacturing solutions. We develop standard and customised sensor solutions that comply with international standards and regulations.

#### Lighting

Resilient to environment changes, microwave sensor modules enable energy and cost savings in smart lighting solutions.

precise speed and range

athletes' performance.

measurements to provide valuable

and actionable insights that maximize

Sports

#### Automotive

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Compact, reliable and cost effective, microwave sensor modules provide instantaneous blind-spot detection data, enhancing safety of the driver and his passengers.

#### Touch-free

Microwave sensor modules can be hidden in non-metallic enclosures and are resilient to dust/dirt accumulation, making them suitable for most consumer automation applications such as contactless switches, auto-toilets and auto-doors.

Traffic

Exploit maximum performance under all-weather conditions for traffic monitoring, control and signs.

Security

Sensitive and free from blind

modules are ideal for security

zones, microwave sensor

## **Our Solutions**

We offer a complete range of microwave sensors operating in the C-, X- and K-band frequencies. The C- and X-Band microwave sensor modules may be used in security, lighting, and touch-free applications while the K-Band sensor modules extend the applications into automotive, traffic and sports.



# C-, X-Band Microwave Sensor Selection Guide

Model	Range (m)	Beam X (°)	Pattern Y (°)	I/Q	IF/RF Amp	Power Supply	vco	Size LxWxH mm (inches)	Wt. (g)	Typical Applications	Applicable Country
LB200-1				No	Yes/No		No	30 x 28 x 23 (1.2 x 1.1 x 0.9)	7	Security, lighting	Worldwide
■ LB200-2	12 Ø	On direc	nni- tional		No/No		No				
HB100	18	- 80 40 - 80	40	No No/No			No	40 x 46.5 x 8.7 (1.6 x 1.8 x 0.3)	8	_	USA, Canada
HB180	15						Yes	40 x 46.5 x 11.5 (1.6 x 1.8 x 0.5)	17		USA, Europe
HB181	24		40		E /70	Yes	40 x 52.5 x 11.5 (1.6 x 2.1 x 0.5)	20		USA, Europe	
НВ190	15		40		100/100	5/30	No	38.6 x 46.3 x 8.8 (1.5 x 1.8 x 0.4)	10	Security, lighting, sports, touch-free	Belgium, Italy, Netherlands
HB490	10						No				Germany
НВ590	15						No				UK
HB590-FR	10						No				France
HB170	25				No/Yes	5/40	No	40 x 46.5 x 11.5 (1.6 x 1.8 x 0.5)	19		Belgium, Italy, Netherlands
HB570	25						No				UK



# Aesthetic Flexibility

Senses through non-metals, enabling sleek and/or waterproof enclosures



### Non-intrusive

Monitors silently without identification



### <u>Safe</u>

Up to 50 times lower emissions than mobile phones



# Weather-proof

Resilient to visibility variations and withstands deployments in harsh environments



# Data-rich

Provides valuable information such as speed, range and direction in a single package

Range estimation is for typical human detection3V version available

# K-Band Microwave Sensor Selection Guide

Model	Range	Beam Pattern			IF/RF	Power	VCO	Size LxWxH	Wt.	Typical	Applicable
	(m)	X (°)	Y (°)	1/Q	Amp Sup (V/n	(V/mA)		mm (inches)	(g)	Applications	Country
AP11	_	3 80	32	No	No/No	5/30	No	15.2 x 24.0 x 11.8 (0.6 x 1.0 x 0.5)	1.4	Security, touch-free	
AP11-S	3							15.2 x 21.5 x 3.5 (0.6 x 0.8 x 0.1)	1.2		
AP81	15				No/No	5/30					
AP82	23	23 50 15 23	24	Yes	No/Yes	5/60	No	38.4 x 31.6 x 11.5 (1.5 x 1.2 x 0.5)	5	Security, traffic, sports, automotive	
AP83	15				Yes/No	5/36					
AP84	23				Yes/Yes	5/66					
AP96	15		32	No		F /70	No	 25.4 x 25.4 x 11.7	2	Security, lighting touch-free	
AP97	10	80		Yes			No			Security, touch- free, automotive	
AP98	7 Ø	Omni- directional		No	INO/INO 5/30	No	(1.0 x 1.0 x 0.5)		Security, lighting	worldwide	
<b>A</b> P99	10	80	32	Yes			Yes			Security, automotive	
DF100	100	24 16 16 16 24	12		5/45		65 x 65 x 12 (2.6 x 2.6 x 0.5)	75			
DF101	100		12			5/45 5/45 5/45 No 5/75	No	112.6 x 65 x 12 (4.4 x 2.6 x 0.5)	105		
DF102	100		12								
DF103	200		6					136 x 108 x 12 (5.4 x 4.3 x 0.5)	175		
DF300	200		12	Yes	; Yes/Yes		65 x 65 x 12 (2.6 x 2.6 x 0.5)	75	Traffic, sports		
DF600	100	24	12			5/45					
DF800	200	24 24 50	12			5/75		65 x 65 x 15.6 (2.6 x 2.6 x 0.6)	40		
DF990	100		12			5/45	· Yes				
DF995	75		18			5/45					

Range estimation is for typical human detection

Range estimation is for typical sedan car detection

3 V version available

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