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TELTRON
Telecommunications & Electronics

Model
TMS100

X-Band Motion Sensor

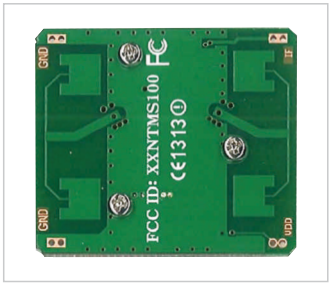
Features

TMS100 is X-band Doppler motion sensor to detect motion. It consists of DR(dielectric resonator) oscillator, passive diode and patch antennas and provides most reliable solution in motion detection.

Applications

- Intrusion alarm
- Automatic door
- Obstruction alarm system
- Velocity measurement
- Automatic light control-energy saving
- System air-conditioner-zone control

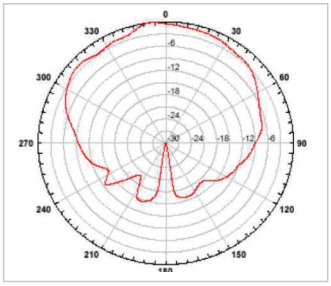
Picture



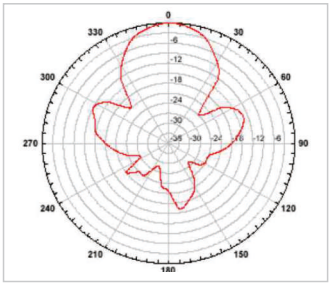
H-axis

E-axis

Antenna beam pattern



E-axis



H-axis

Electrical Specifications

Parameters		Min.	Typ.	Max.	Unit	Condition
CW	Frequency		10,525±12.5		MHz	Over Temp.
	Output Power (EIRP)			15	dBm	
	Power Supply	4.75	5	5.25	V	
	Current Consumption	30		60	mA	CW
	Settling time			6	μs	
	Noise			10	μVrms	3~80 Hz
	Received Signal			20	mVp-p	max
	3dB Antenna Beam Width - E-axis		81		°	
	3dB Antenna Beam Width - H-axis		36		°	
	Operating temp.	-20		+55	℃	
	Storage temp.	-30		+70	℃	
	Size		45 x 40 x 10		㎜³	
Pulse Operation	Pulse Width	5			μs	
	Duty Cycle	1			%	
	Average Current		2		mA	@5% duty

Warning : The specifications can be changed without any notice.

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Model
TMS100

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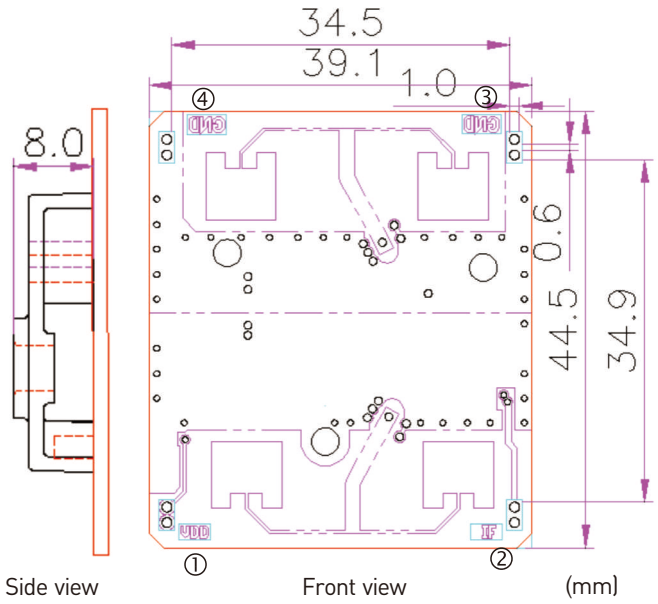
X-Band Motion Sensor

Dimension

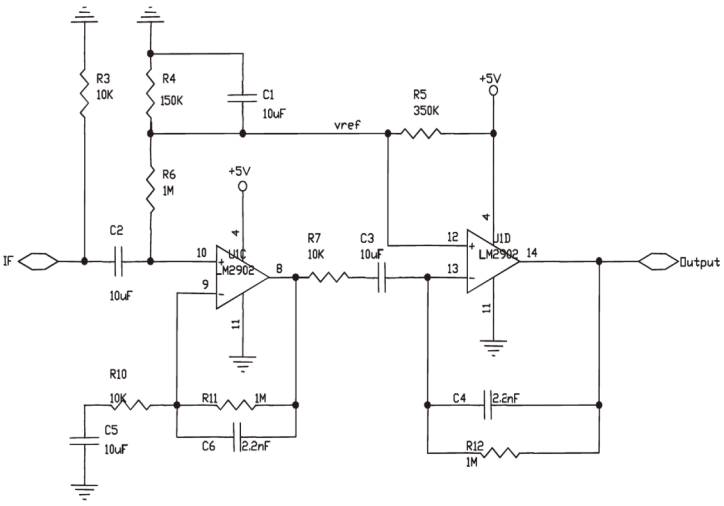


Side view Front view (mm)

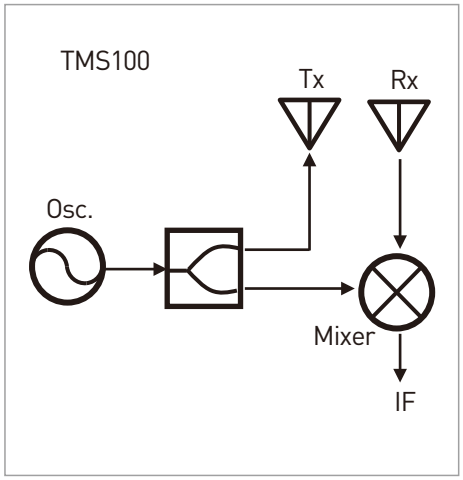
Pin Description

#	Pin Name	Explanation
1	VDD	Power, +5V
2	IF	Output
3	GND	Ground
4	GND	Ground

Application Circuit Example



Block Diagram



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Model
TMS200

X-Band Motion Sensor

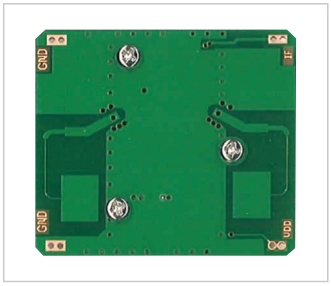
Features

TMS200 is X-band Doppler motion sensor to detect motion. It consists of DR(dielectric resonator) oscillator, passive diode and patch antennas and provides most reliable solution in motion detection.

Applications

- Intrusion alarm
- Automatic door
- Obstruction alarm system
- Velocity measurement
- Automatic light control-energy saving
- System air-conditioner-zone control

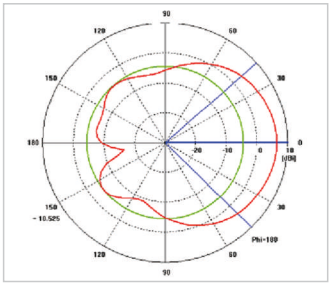
Picture



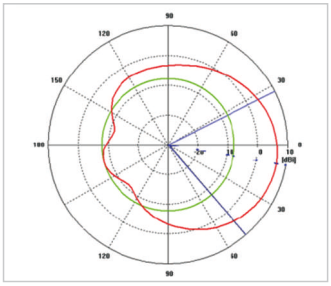
H-axis

E-axis

Antenna beam pattern



E-axis



H-axis

Electrical Specifications

Parameters		Min.	Typ.	Max.	Unit	Condition
CW	Frequency		10,525±12.5		MHz	Over Temp.
	Output Power (EIRP)			15	dBm	
	Power Supply	4.75	5	5.25	V	
	Current Consumption	30		60	mA	CW
	Settling time			6	μs	
	Noise			10	μVrms	3~80 Hz
	Received Signal			20	mVp-p	max
	3dB Antenna Beam Width - E-axis		67		°	
	3dB Antenna Beam Width - H-axis		54		°	
	Operating temp.	-20		+55	℃	
	Storage temp.	-30		+70	℃	
	Size		45 x 40 x 10		㎜³	
Pulse Operation	Pulse Width	5			μs	
	Duty Cycle	1			%	
	Average Current		2		mA	@5% duty

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Model
TMS200

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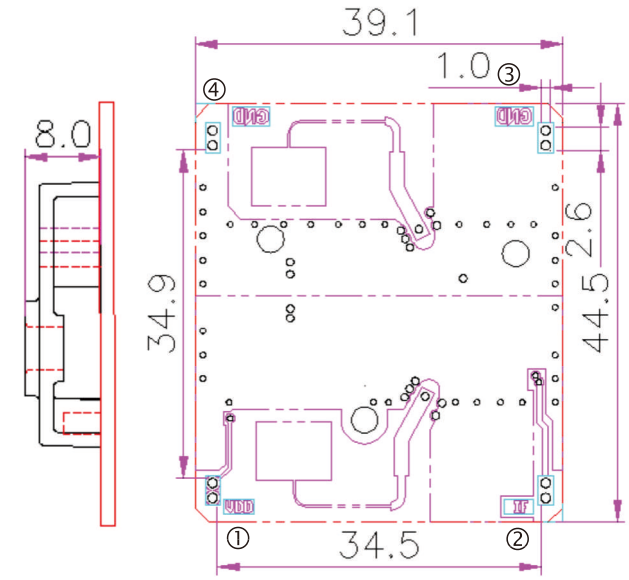
X-Band Motion Sensor

Dimension

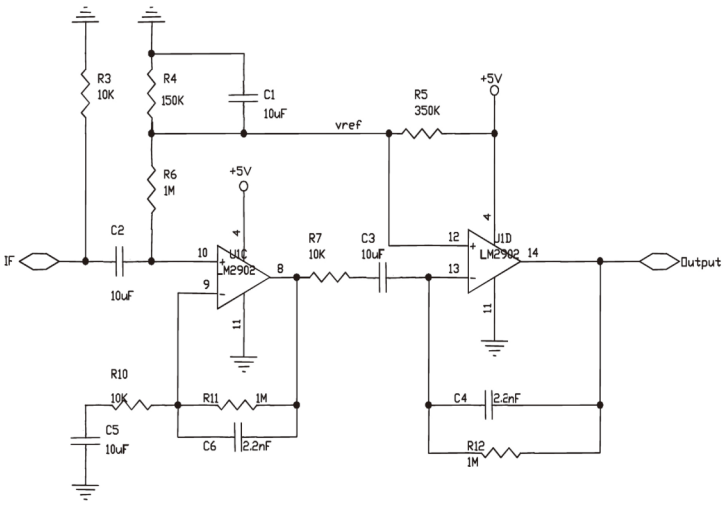


Side view Front view (㎜)

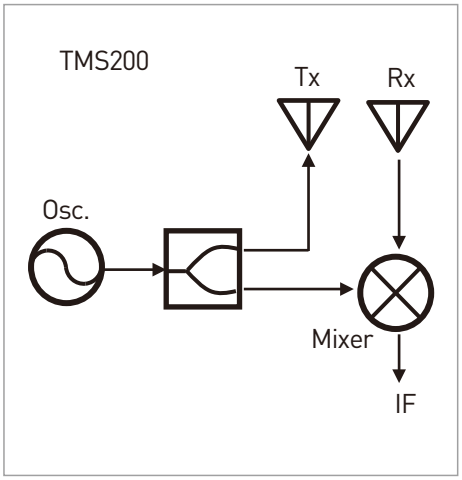
Pin Description

#	Pin Name	Explanation
1	VDD	Power, +5V
2	IF	Output
3	GND	Ground
4	GND	Ground

Application Circuit Example



Block Diagram



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Model
TMS240

K-Band Motion Sensor

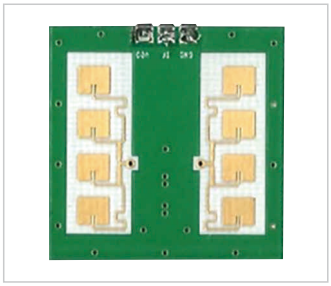
Features

TMS240 is a small sized K-band Doppler motion sensor to detect motion. It consists of low current P-HEMT oscillator and separated Tx/Rx patch antennas and provides most reliable solution in motion detection.

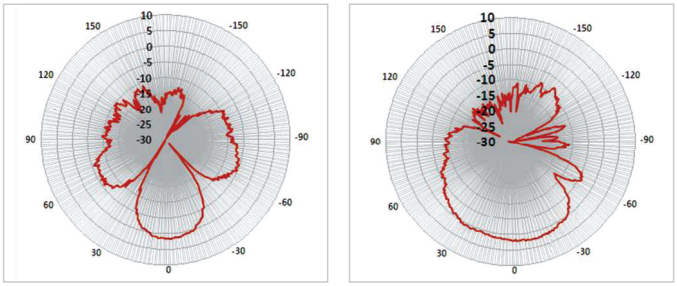
Applications

- Intrusion alarm
- Automatic door
- Obstruction alarm system
- Velocity measurement
- Automatic light control-energy saving
- System air-conditioner-zone control

Picture



Antenna beam pattern



Electrical Specifications

Parameters	Min.	Typ.	Max.	Unit	Condition
Frequency		24,125±50		MHz	Over Temp.
Output Power (EIRP)			15	dBm	
Power Supply	4.75	5	5.25	V	
Current Consumption		30	40	mA	CW
Frequency Stability		±10		MHz	
IF Output	0		300	mV	
3dB Antenna Beam Width - H-axis		80		°	
3dB Antenna Beam Width - E-axis		32		°	
Operating temp.	-20		+60	℃	
Size		27 x 27 x 7		㎣	

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Model
TMS240

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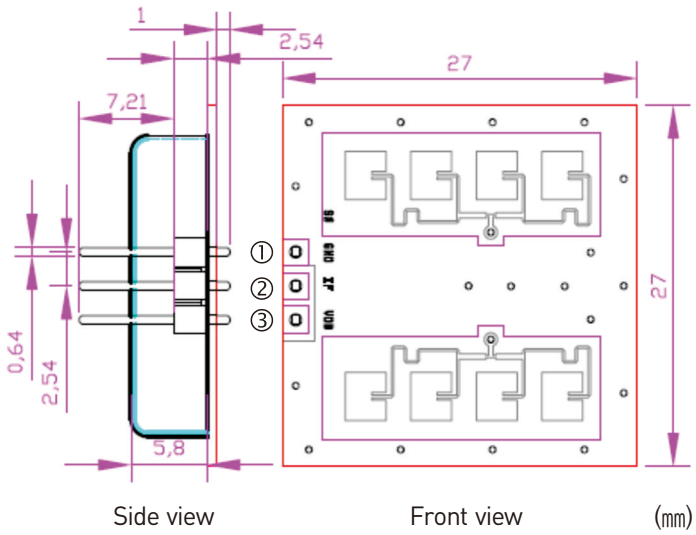
K-Band Motion Sensor

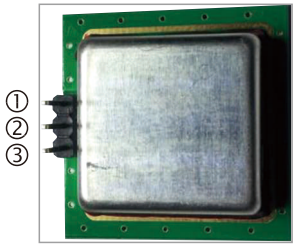
Dimension



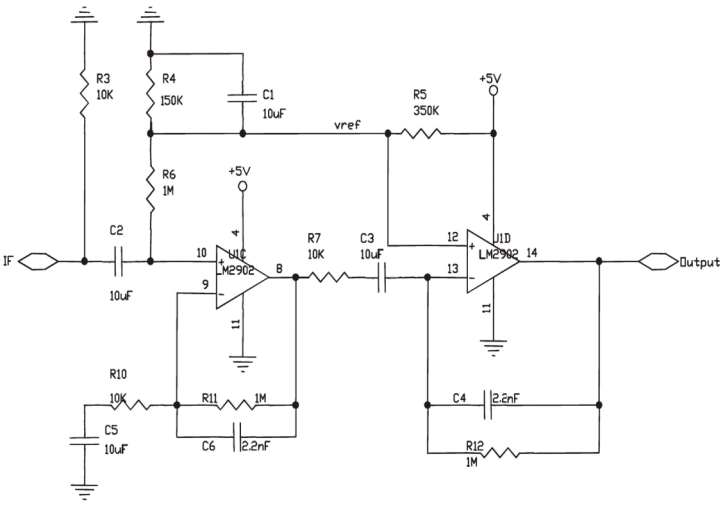
Side view Front view (㎜)

Pin Description

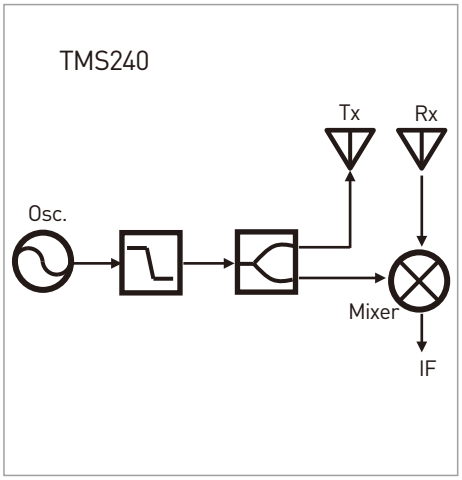
#	Pin Name	Explanation
1	GND	Ground
2	IF	Output
3	VDD	Power, +5V



Application Circuit Example



Block Diagram



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Model
TMS300

X-Band Motion Sensor

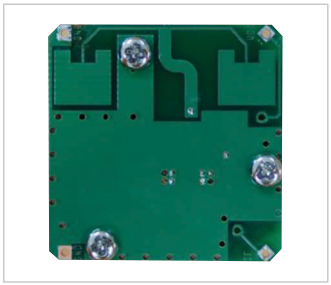
Features

TMS300 is X-band Doppler motion sensor to detect motion. It consists of DR(dielectric resonator) oscillator, passive diode and patch antennas and provides most reliable solution in motion detection.

Applications

- Intrusion alarm
- Automatic door
- Obstruction alarm system
- Velocity measurement
- Automatic light control-energy saving
- System air-conditioner-zone control

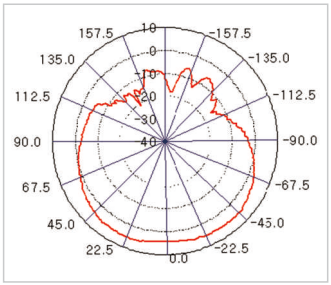
Picture



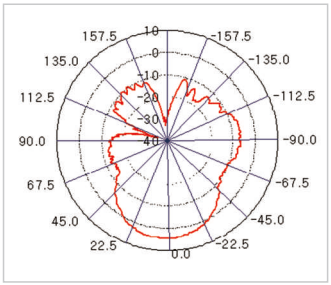
E-axis

H-axis

Antenna beam pattern



E-axis



H-axis

Electrical Specifications

Parameters		Min.	Typ.	Max.	Unit	Condition
CW	Frequency		10,525±12.5		MHz	Over Temp.
	Output Power (EIRP)			15	dBm	
	Power Supply	4.75	5	5.25	V	
	Current Consumption	30		60	㎃	CW
	Settling time			6	㎲	
	Noise			10	㎶rms	3~80 Hz
	Received Signal			20	㎷p-p	max
	3dB Antenna Beam Width - E-axis		130		°	
	3dB Antenna Beam Width - H-axis		46		°	
	Operating temp.	-20		+55	℃	
	Storage temp.	-30		+70	℃	
	Size		30x 30 x 10		㎜³	

Warning : The specifications can be changed without any notice.

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Model
TMS300

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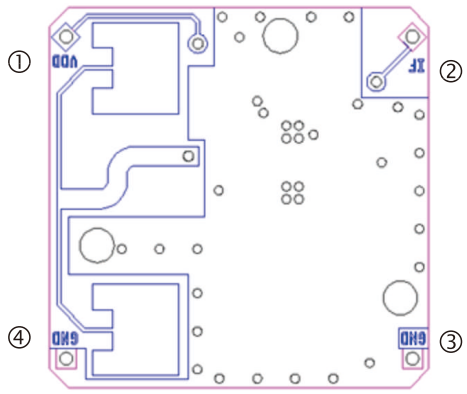
X-Band Motion Sensor

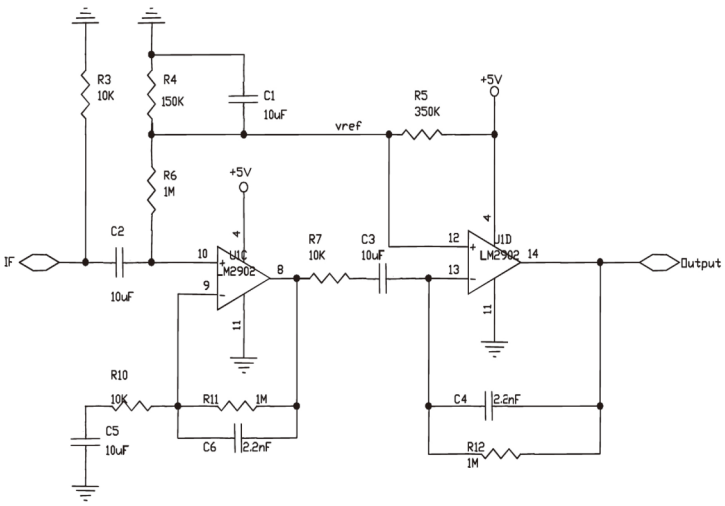
Dimension



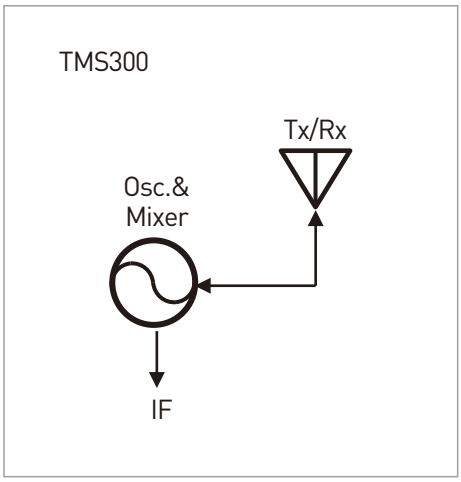
Pin Description

#	Pin Name	Explanation
1	VDD	Power, +5V
2	IF	Output
3	GND	Ground
4	GND	Ground

Application Circuit Example



Block Diagram



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Model
TMS400

X-Band Motion Sensor

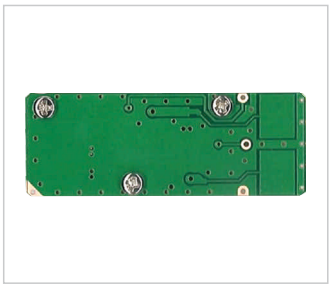
Features

TMS400 is X-band Doppler motion sensor to detect motion. It consists of DR(dielectric resonator) oscillator, passive diode and patch antennas and provides most reliable solution in motion detection.

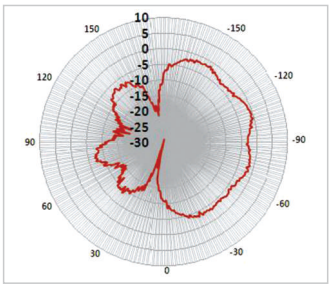
Applications

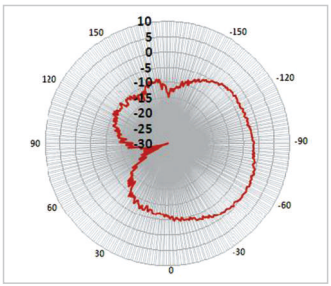
- Intrusion alarm
- Automatic door
- Obstruction alarm system
- Velocity measurement
- Automatic light control-energy saving
- System air-conditioner-zone control

Picture



Antenna beam pattern





Electrical Specifications

Parameters		Min.	Typ.	Max.	Unit	Condition
CW	Frequency		10,525±12.5		MHz	Over Temp.
	Output Power (EIRP)		10		dBm	
	Power Supply	4.75	5	5.25	V	
	Current Consumption	30		60	mA	CW
	Settling time			6	μs	
	Noise			10	μVrms	3~80 Hz
	Received Signal			20	mVp-p	max
	3dB Antenna Beam Width - E-axis		74		°	
	3dB Antenna Beam Width - H-axis		85		°	
	Operating temp.	-20		+55	℃	
	Storage temp.	-30		+70	℃	
	Size		51.5 x 19.2 x 9.0		㎜³	
Pulse Operation	Pulse Width	5			μs	
	Duty Cycle	1			%	
	Average Current		2		mA	@5% duty

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Model
TMS400

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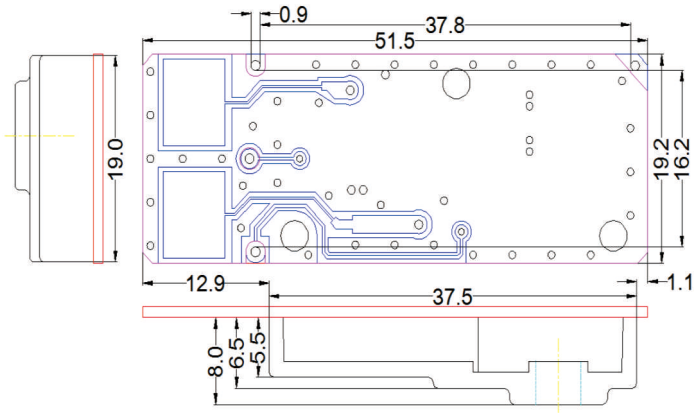
X-Band Motion Sensor

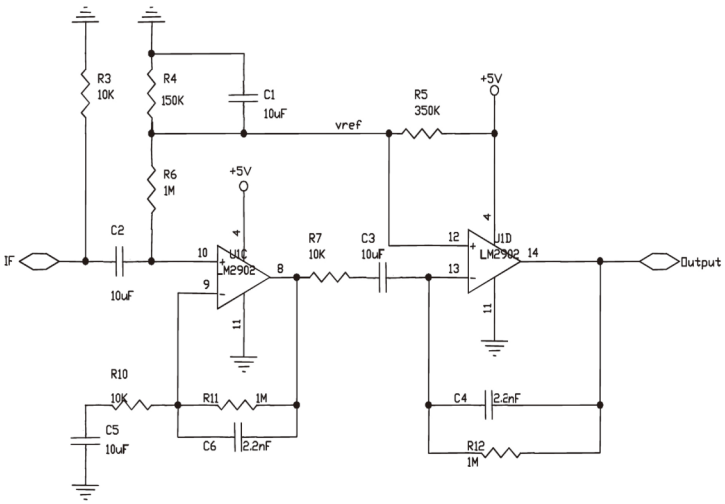
Dimension



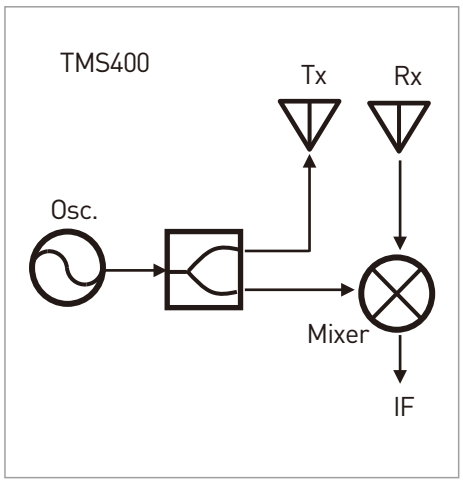
Pin Description

#	Pin Name	Explanation
1	VDD	Power, +5V
2	IF	Output
3	GND	Ground
4	GND	Ground

Application Circuit Example



Block Diagram



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TELTRON
Telecommunications & Electronics

Model
TMSM 100-1500

AutoOn

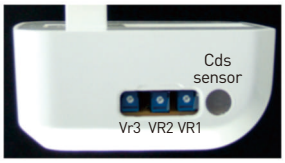
Features

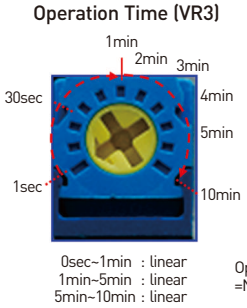
AutoOn is a microwave sensor that detects minute motion of human bodies and reflective objects. The detection range can be adjusted according to the area of the application.

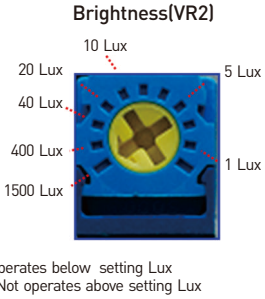
Applications

- Intrusion alarm
- Automatic door
- Automatic light control-energy saving
- System air conditioner – zone control

Picture and Setting







Specifications

Item		Specification	Default setting	Note
Voltage		Single phase 110~250 VAC, 50~60 Hz	-	
Load		1,100 Watt max.	-	
Ambient temperature		-10 ~ 60 ℃	-	Indoor use only
Humidity		50% max.	-	Avoid a humid condition
VR1	range	CW: decrease , CCW: increase	Max. range	detection range: 3~25m
VR2	Cds sensor 1 ~1,500 Lux	CW: lighter CCW: darker	Always on	min: Cds ON max: Cds ON at dark
VR3	Time	CW: decrease, CCW: increase	1 second	1second~10minute
Angle Control		Vertical and Horizontal	-	
Size		85 x 145 x 100 ㎜³	-	

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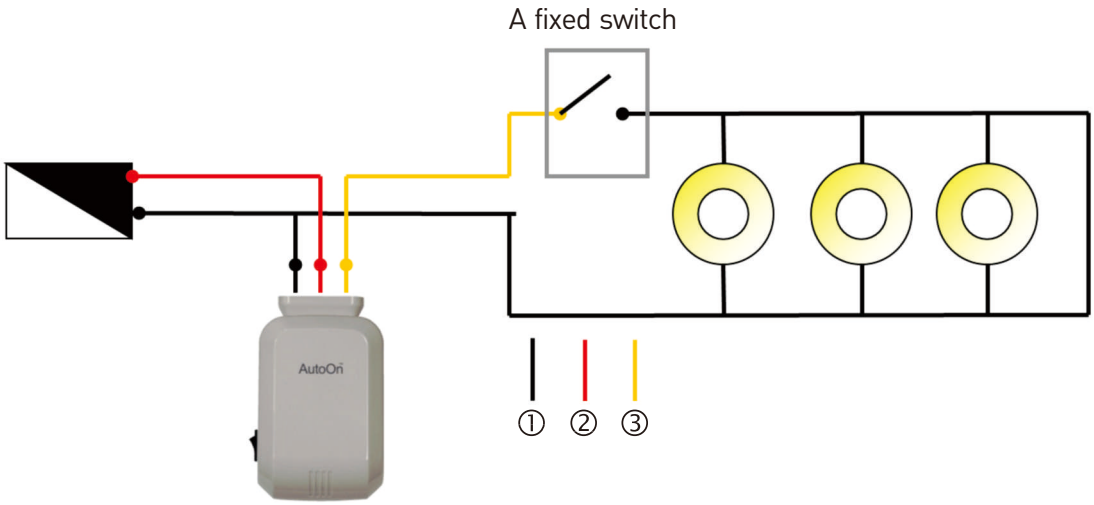
AutoOn

Wiring

No	Wire Color
1	Black
2	Red
3	Yellow

Wiring - when load is less than 1000W



※CAUTION-when connection is mismatched, the product could be damaged

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TELTRON
Telecommunications & Electronics

Model
TMSM 100-DC

AutoOn-DC

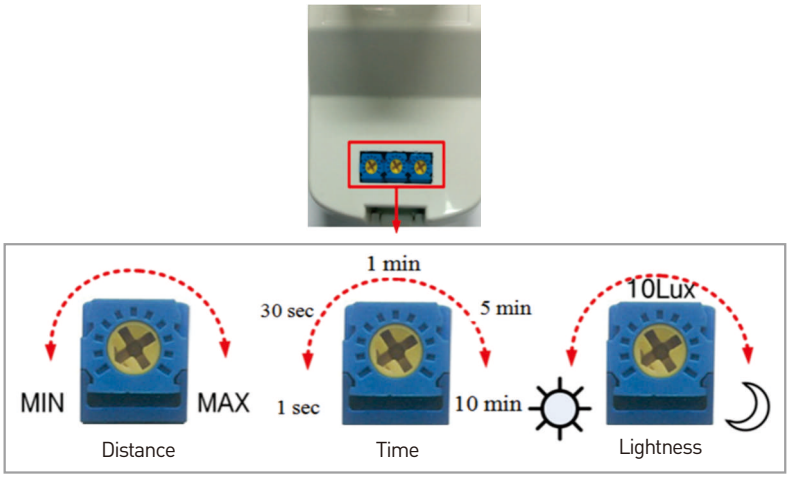
Features

AutoOn-DC is a microwave sensor that detects minute motion of human bodies and reflective objects. It uses DC (12V~24V) by automatically on and off electric instruments including lamps.

Applications

- Intrusion alarm
- Automatic door
- Automatic light control-energy saving
- System air-conditioner – zone control

Picture and Setting



Specifications

Item	Specification	Default setting	Note
Voltage	DC 12~24 V	-	
Current consumption	55 mA	-	
Output	Open collector		
Detection range	5~20 meter		
Timer	1 sec. ~ 10 min.		Adjustable
Lightness	Day and Night minute control		
Ambient temperature	-10 ~ 60 ℃	-	Indoor use only
Humidity	50% max.	-	Avoid a humid condition
Size	80 X 50 X 85 ㎜³	-	

Warning : The specifications can be changed without any notice.

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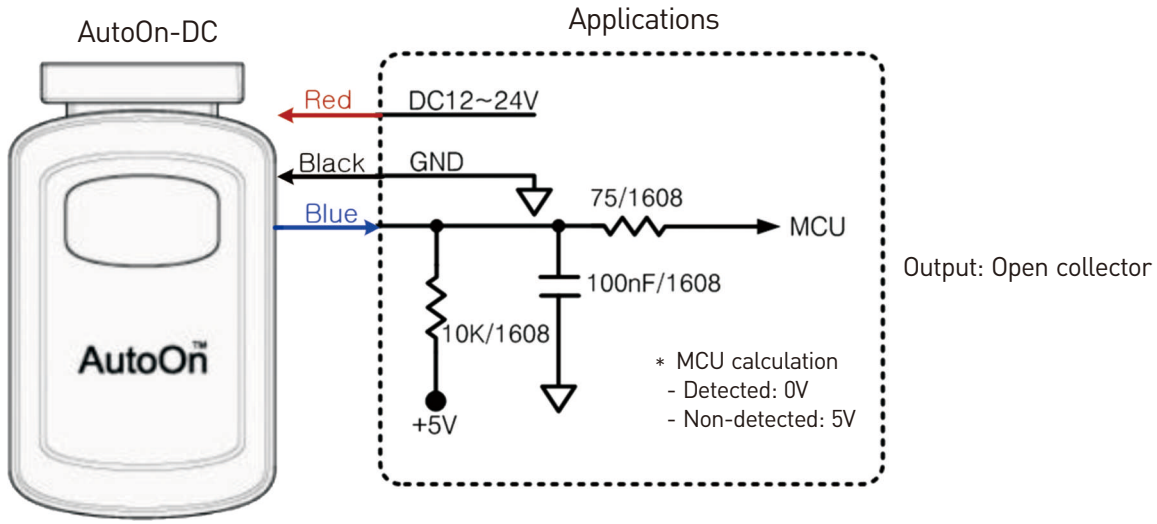
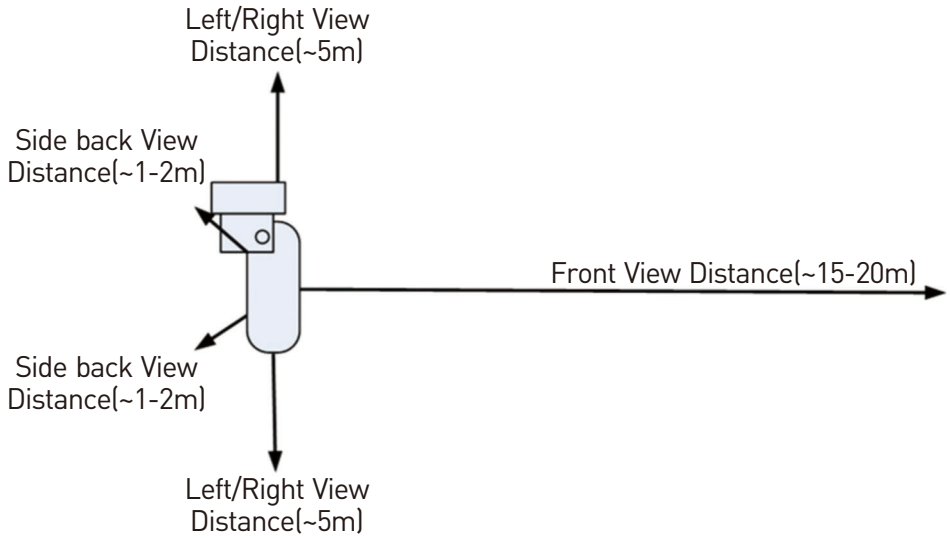
AutoOn-DC

Application circuit



Detection range



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TELTRON
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Model
TMSM 100-S

AutoOn-AC

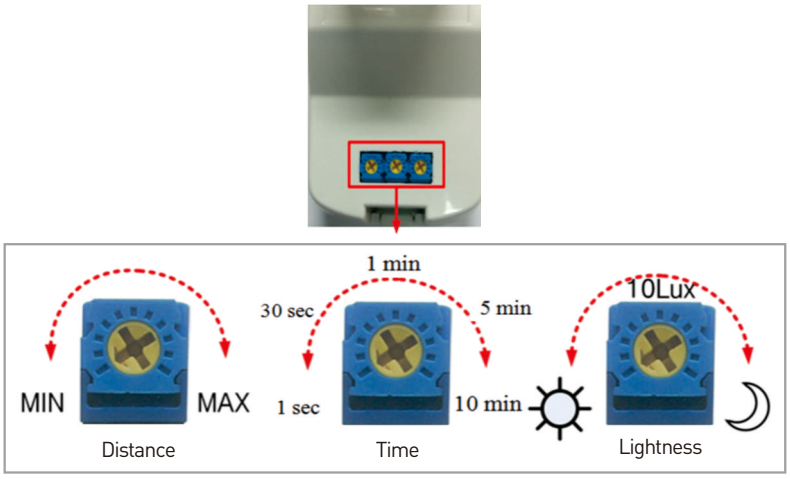
Features

AutoOn-AC is a microwave sensor that detects minute motion of human bodies and reflective objects. It uses AC (100V~245V / 50~60Hz) by automatically on and off electric instruments including lamps.

Applications

- Intrusion alarm
- Automatic door
- Automatic light control-energy saving
- System air-conditioner – zone control

Picture and Setting



Specifications

Item	Specification	Default setting	Note
Voltage	AC 100~250 V / 50~60 Hz	-	
Current consumption	55 mA	-	
Output	Relay Contact		
Detection range	5~20 meter		
Timer	1 sec. ~ 10 min.		Adjustable
Lightness	Day and Night minute control		
Ambient temperature	-10 ~ 60 ℃	-	Indoor use only
Humidity	50% max.	-	Avoid a humid condition
Size	80 x 50 x 85 ㎜	-	

Warning : The specifications can be changed without any notice.

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AutoOn-AC

Application circuit

Red
Red

Power Input
(AC100~250V/50~60Hz)

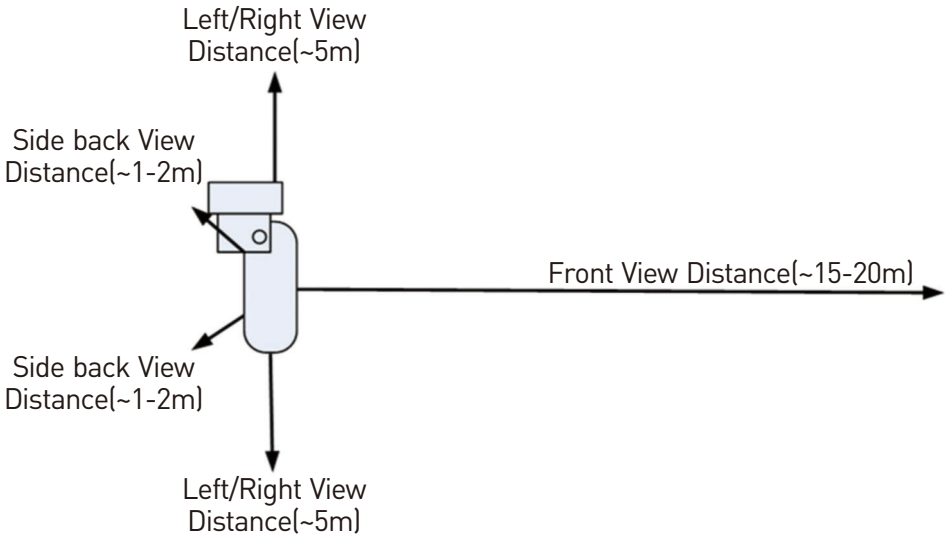
Blue

Blue

Relay contact Output
- detected: short
- non-detected: open

* Caution!
Do not connect AC power line to Relay Contact.

Detection range



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TELTRON
Telecommunications & Electronics

Model
TMSM 200-100

AutoOn-mini

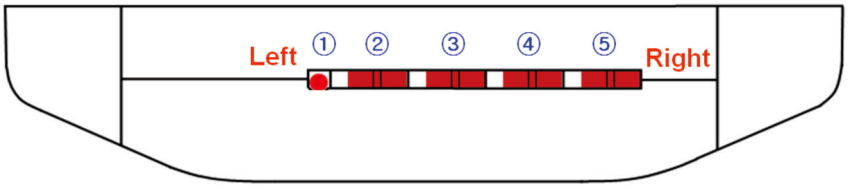
Features

AutoOn-mini is a microwave sensor that detects minute motion of human bodies and reflective objects. It is operated by AC source and automatically on and off electric instruments including lamps.

Applications

- Intrusion alarm
- Automatic door
- Automatic light control-energy saving
- System air-conditioner – zone control

Picture and Setting



① Power LED ② Time1 ③ Time2 ④ Coverage ⑤ Brightness

	Switch		
Switch ② and ③	Switch ②	Switch ③	Time duration
	left	left	1 second
	right	left	30 second
	left	right	1 minute
	right	right	5 minute
Switch ④ (sensing range)	left	right	Condition of rounded sensitivity Height : 2.5 m Radius: 2.5 m^2
	Max. Approximately 5 meter	Min. Approximately 3 meter	
Switch ⑤ (Illumination sensor)	left	right	Threshold : 10 Lux
	Activate (dark only)	Activate (always)	

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Model
TMSM
200-100

www.teltron.com

AutoOn-mini

Specifications

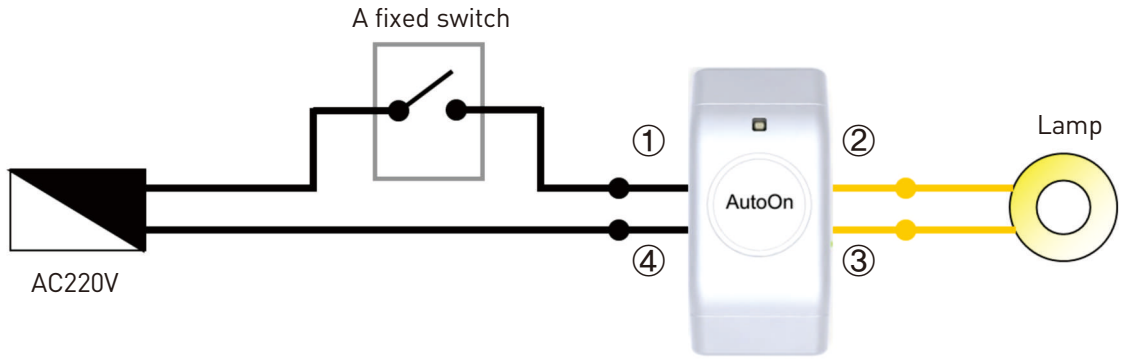
Item	Specification	Note
Voltage	Single phase 110~250 VAC, 50~60 Hz	
Load	100 Watt max.	
Ambient temperature	-10 ~ 60 ℃	Indoor use only
Humidity	50% max.	Avoid a humid condition
Size	110 X 53 X 25 ㎜³	

Warning : The specifications can be changed without any notice.

Wiring

No	Wire
1	Black
2	Yellow
3	Yellow
4	Black

* No3 and No4 is used for common.



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