Honeywell

DT8320F4-SN / DT8320F5-SN DUAL TEC® Ceiling Mount Motion Sensor
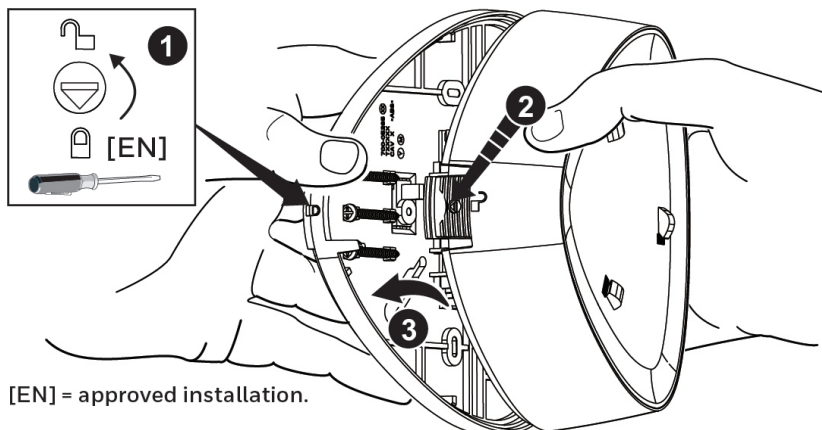
Installation Instructions

1. Selecting the Mounting Location

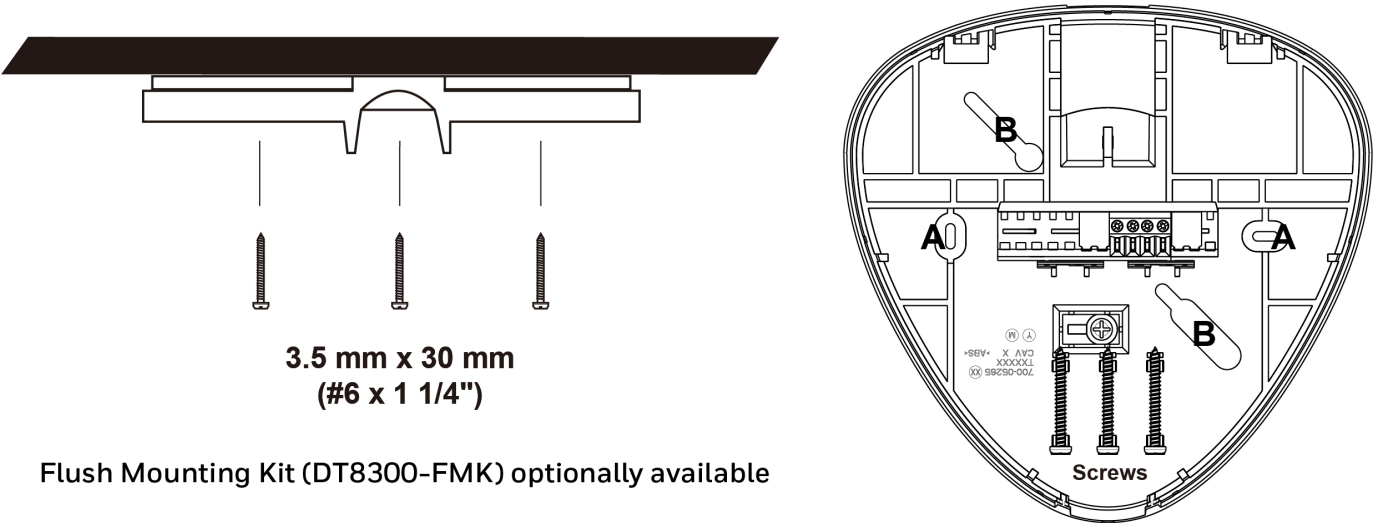Mounting location guidelines:

- The range is obtained at a mounting height of 2.4m (8') to 8m (26'). Max. detection range at 8m (26') is Ø 21m (70').
- Allow a clear line-of-sight to all areas to protect.
- Avoid mounting anything within 30cm (12") in front of the sensor.
- Do not directly face windows.
- Avoid close proximity to moving machinery, fluorescent lights, and heating/cooling sources.
- Not for use in applications with pets.
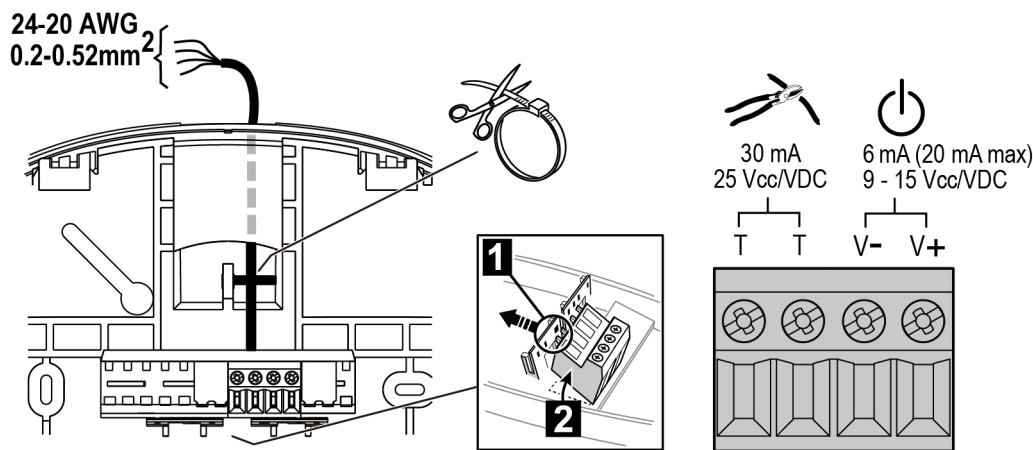
2. Open the Sensor

[EN] = approved installation.

1. Turn the arrow to point to the Unlock symbol.
2. Press firmly on housing latch.
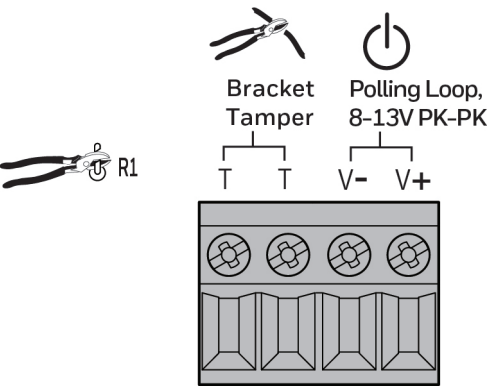3. Gently separate the front and rear housing.

3. Mount the Sensor

**3.5 mm x 30 mm
(#6 x 1 1/4")**

Flush Mounting Kit (DT8300-FMK) optionally available

Screws

[A] = Fixed mounting holes
[B] = Adjustable mounting slots from 61mm–85mm (2.4"–3.3")
To ensure that the sensor remains within the scope of the approvals, a proper mounting of the rear housing to a solid surface is mandatory.
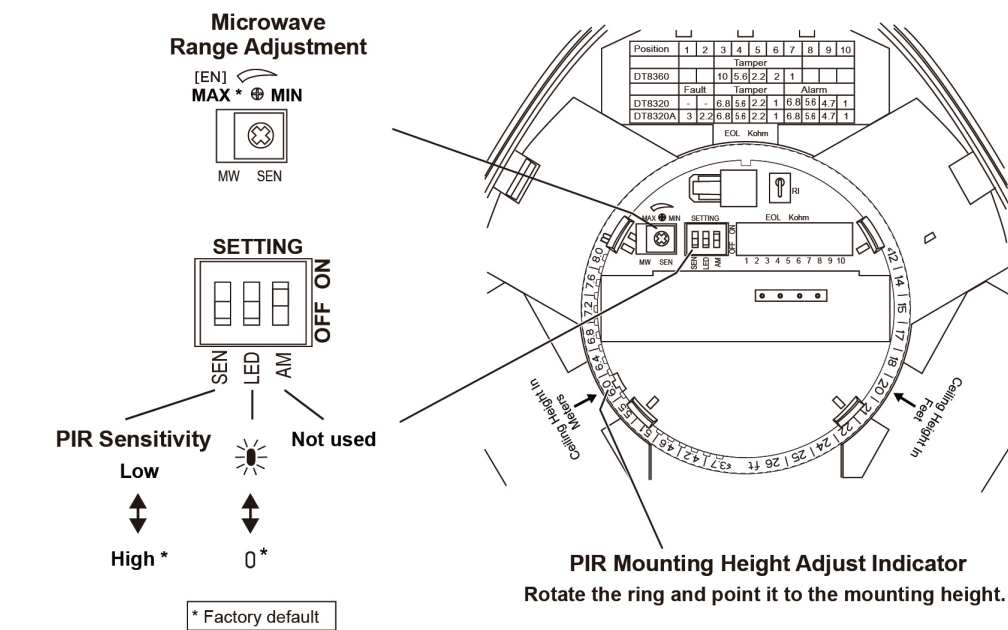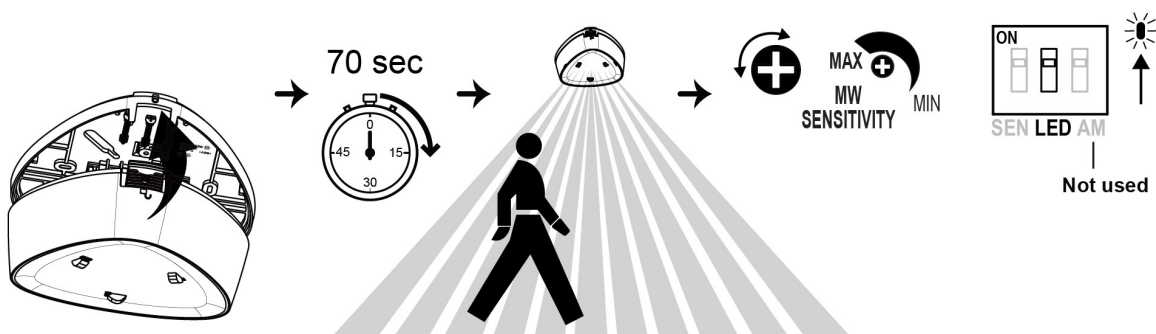
4. Wire the Sensor

24-20 AWG
0.2-0.52mm^2

30 mA 25 Vcc/VDC	6 mA (20 mA max) 9 - 15 Vcc/VDC
T T	V− V+

If bracket tamper is used, the 2 wires of the tamper can be connected to Bracket Tamper. The R1 should be cut to enable this function.

R1

Bracket Tamper	Polling Loop, 8-13V PK-PK
T T	V− V+

5. Sensor Components and Settings

Microwave Range Adjustment

[EN]
MAX * ⊕ MIN

MW   SEN

SETTING

OFF   ON

SEN   LED   AM

PIR Sensitivity
Low

High *   0 *

Not used

* Factory default

Position	1	2	3	4	5	6	7	8	9	10
					Tamper					
DT8360				10	5.6	2.2	2	1		
			Fault		Tamper			Alarm		
DT8320	-	-	6.8	5.6	2.2	1	6.8	5.6	4.7	1
DT8320A	3	2.2	6.8	5.6	2.2	1	6.8	5.6	4.7	1

EOL Kohm

MAX ⊕ MIN   SETTING   EOL Kohm
MW SEN   SEN LED AM   1 2 3 4 5 6 7 8 9 10

Ceiling Height in Meters

Ceiling Height in Feet

PIR Mounting Height Adjust Indicator
Rotate the ring and point it to the mounting height.

6. Walk Test the Sensor and Adjust as Needed

70 sec

MAX   MW   MIN
SENSITIVITY

ON
SEN LED AM

Not used

1. Close the sensor and apply power to the sensor. Initialization is complete when the LED stops flashing slowly (about 70 seconds).
2. Walk through the detection area and observe the LED.
3. Adjust the microwave range as necessary to meet installation requirements.

Walk test mode is active for 15 minutes, then automatically exits test mode, disables the LED and enters normal operation mode. For an additional 15 minute walk test, enable walk test mode again with the **flashlight feature**.

Notes:

- During power up and walk test modes the LED is active regardless of the LED Enable/Disable DIP switch setting.
- When the microwave sensitivity is set to minimum, the sensor range is reduced to Ø 12m (40'). When the microwave sensitivity is set to maximum, the sensor range is Ø 21m (70').
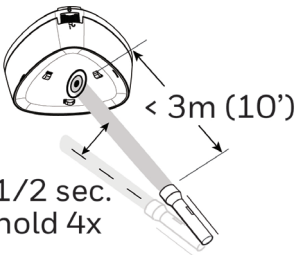
LED	Power Up	Walk Test [15 min.]	Normal	Fault
Red	Slow Blink	ON Alarm	ON Alarm	Fast Blink
Yellow	OFF	ON Microwave	OFF	OFF
Green	OFF	ON PIR	OFF	OFF

Flashlight Feature:
1. Use a flashlight with a bright light beam, and stand within 3m (10') of the sensor.
2. Swing the light beam past the sensor IR window 3-5 times consistently, holding the beam on the window for 0.5 second each pass.

Notes:

- The flashlight feature is available for the first 24 hours after power up.
- The flashlight feature only works with incandescent bulb flashlights. It does not work with LED flashlights.
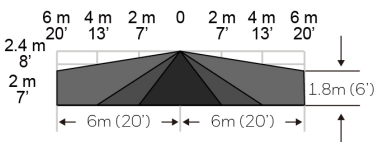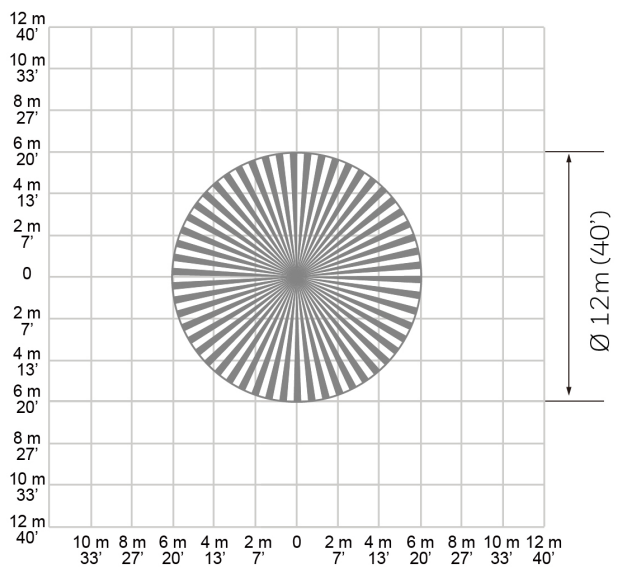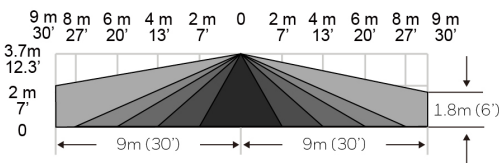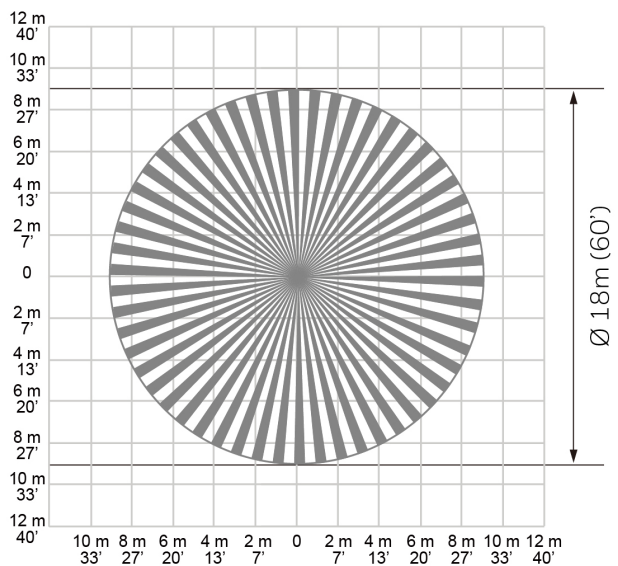
< 3m (10')

1/2 sec.
hold 4x

7. Detection Patterns

Top View

Side View

Ø 21m (70')

10.5m (35')   10.5m (35')   1.8m (6')

Ø 18m (60')

9m (30')   9m (30')   1.8m (6')

Ø 12m (40')

6m (20')   6m (20')   1.8m (6')
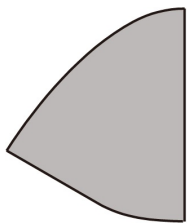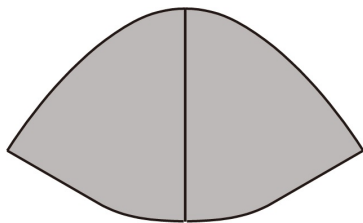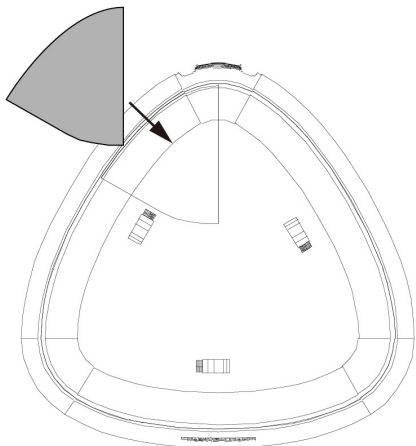
8. Coverage Pattern Masking (DT8300-CPM)

A set of 60° masks are provided for masking undesired areas. Attach the masks on the outside of the detector. With the supplied masks, you can mask 60°, 120°, 180° or 240°. Refer to the following examples:
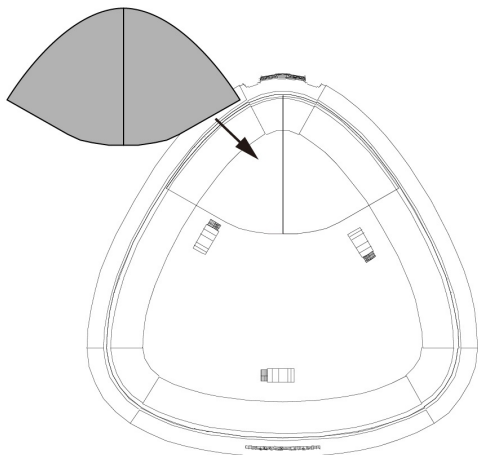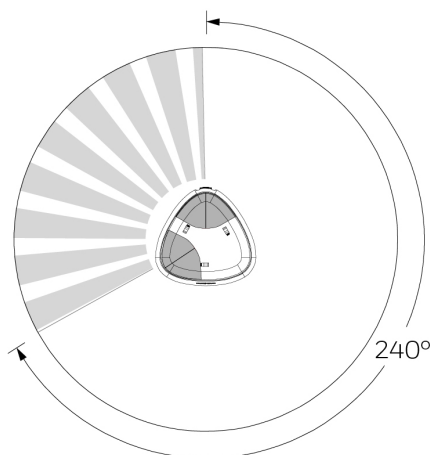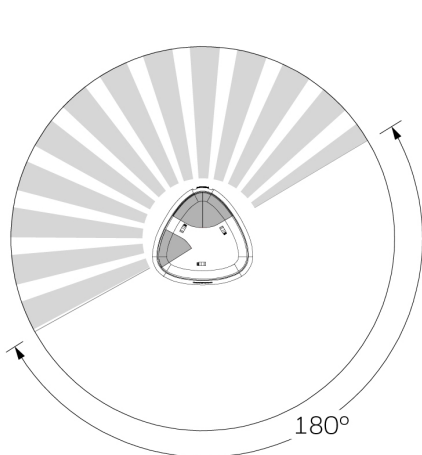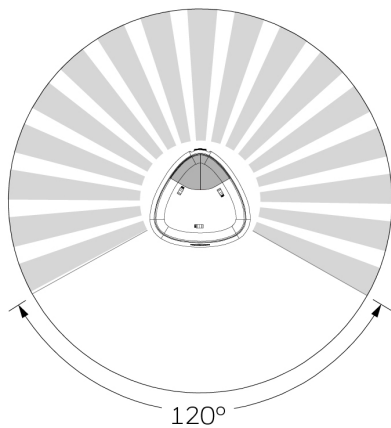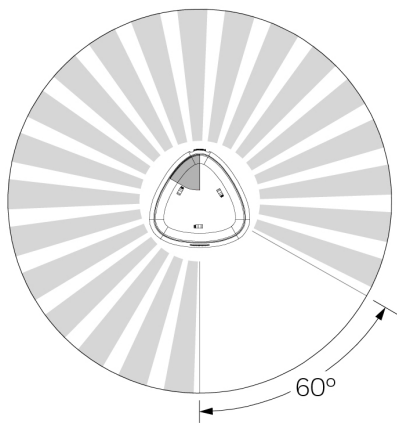

60° Mask

120° Mask

Masking 60°

Masking 120°

Note: To mask a certain area, attach the mask on the opposite side of the sensor, referring to the following examples.

60°

120°

180°

240°

TROUBLESHOOTING

	NORMAL	Low Voltage[1]	Self-Test Failure[2]
Red LED	Off	Off	Flashing
Yellow LED	Off	Off	Off

*TROUBLE CONDITIONS:
1. Low Voltage: The sensor is disabled. **Note:** If voltage drops below 5V, both Alarm and Trouble relays open.
2. Self-Test Failure conditions:
   - Microwave supervision failure.
   - PIR self-test failure.
   - Temperature compensation failure.

Depending on the Trouble condition, take the following corrective actions:
- Verify the sensor is not blocked or masked.
- Verify the power supply is sufficient (at least 9V at the sensor).
- Cycle power to the sensor.
- **Walk test** the sensor.

If the Trouble condition does not clear, replace the sensor.

SPECIFICATIONS

Range: Ø 21m max. (360°)

Mounting Height: 2.4m – 8m

IP Rating: IP30

Power: 9.0 - 15 VDC; 6 mA standby (V-Plex@ version), 20 mA max., 12 VDC;

AC Ripple: 3 V peak-to-peak at nominal 12 VDC

Tampers: Cover & Wall; (NC with cover installed) Form A; 30 mA, 25 VDC; Magnetic field

Microwave Frequencies:

DT8320F4-SN: 10.525GHz;

DT8320F5-SN: 10.587GHz

RFI Immunity: 10V/m, 80 MHz-2.7 GHz

PIR White Light Immunity: 6,500 Lux typical

Fluorescent light filter: 50 Hz / 60 Hz

Operating Temperature: -10℃ - 55℃

Relative Humidity: 5 to 95%; non-condensing

Temperature Compensation: Advanced Dual Slope

Dimensions: 14.8 cm x 16.2 cm x 4.7 cm

Gross weight: 0.56 kg**; Net weight:** 0.44 kg

Notes

- Install the devices and system in the isolated and dedicated network system with physical security.
- Ensure only the authorized technician may access and operate the device.
- Ensure to have regular system maintenance and check the device functionalities work normally.
- Access https://www.honeywell.com/contact-us/vulnerability-reporting to report any vulnerability.

APPROVAL/ LISTINGS

CE

EN50131-2-4:2008, Security Grade 2, Environmental Class II.

Suitable for connection to an EN 60950 Class II Limited Power Source.

Note: In EN 50131-2-4 compliant installations, set the microwave sensitivity to maximum and lock the sensor housing with the cover lock (see "[EN]" where noted in Steps 1-4).

Important: The sensor should be tested **at least once each year.**

NF&A2P 2 boucliers (référentiel NF324-H58) et conforme aux normes EN50131-2-4 et RTC50131-2-4; IP30 IK04
  DT8320F4-SN – N° de certificat: 2821410016
  DT8320F5-SN – N° de certificat: 2821410018
Organisme de certification:
CNPP Cert. : www.cnpp.com et
AFNOR Cert.: www.marque-nf.com

DT8320F4-SN

DT8320F5-SN
PD6662:2017

The product can be sold in the following countries.

DT8320F4-SN:
Italy, Netherlands, Spain, Portugal, Belgium, Sweden, Denmark, Greece, Norway, Poland, Switzerland, Slovenia, Croatia, Latvia, Lithuania, Cyprus, Malta, Romania, Bulgaria, Montenegro, North Macedonia, Serbia, Bosnia & Herzegovina, Ukraine, Iceland, Liechtenstein.

DT8320F5-SN:
UK, France, Ireland, Hungary, Luxembourg.

EU DECLARATION OF CONFORMITY

Honeywell Security and Fire, declares that this type radio equipment (whose exact reference can be found on the first page of the manual) complies with directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
https://mywebtech.honeywell.com

For any additional information, please refer to our Website:
https://mywebtech.honeywell.com

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United Kingdom

Please contact your local authorised Honeywell representative for product warranty information.

Honeywell

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