

# HANYOUNG NUX Proximity Sensor

- Applied exclusive IC for C-MOS
- Wide range of power supply voltage(5-35 V DC : DC 3 wire type)
- Internal noise enhanced circuit
- Applied the 2 wire type proximity none polarity



## Product Description

Model	Code					Information
UP		-				inductive type proximity sensor
Sensing area size	8					M8
	12					M12
	18					M18
	30					M30
Structure type	RM					Round type Shield
	RD					Round type None Shield
	RLM					Long round type shield(M8 and M12 are excluded)
	RLD					Long round type None shield (M8 and M12 are excluded)
Sensing Distance	1.5					Only for UP8-RM1.5
	2					Only for UP8-RD2, UP12-RM2
	4					Only for UP12-RD4
	5					Only for UP18-RM5, UP18-RLM5
	8					Only for UP18-RD, UP18-RLD
	10					Only for UP30-RM10, UP30-RLM10

	15			Only for UP30-RD15, UP30-RLD15
Power and Output type	N			D.C NPN output
	P			D.C PNP output
	A			A.C 2 wire type
	T			D.C 2 wire type(Polarity)
	U			D.C 2 wire type(No polarity) ※ But M8 is excluded
Output state		A		Normal open(N.O)
		C		Normal close(N.C)
Connection structure		*		No indication (Cable type)
		CR		Relay connector type
		C		Connector type

※ M8 (ø8) is only available with the cable type

Inductive D.C 3 Wire type							
Model	NPN	UP8RM-1.5N	UP8RD2N	UP12RM2N	UP12RD4N	UP18RM5N	UP18RD8N
	PNP	UP8RM-1.5P	UP8RD2P	UP12RM2P	UP12RD4P	UP18RM5P	UP18RD8P
	Size	M8		M 12		M 18	
Shield	Shield	None shield	Shield	None shield	Shield	None shield	
Standard sensing object (mm)	Iron 8 X 8 X 1		Iron 12 X 12 X 1		Iron 18X18X1	Iron 25 X 25 X 1	
Sensing distance	1.5 mm	2 mm	2 mm	4 mm	5 mm	8 mm	
Setting distance	0 ~ 1.2 mm	0 ~ 1.6 mm	0 ~ 1.6 mm	0 ~ 3.2 mm	0 ~ 4 mm	0 ~ 6.4 mm	
Hysteresis	Less than 10% of sensing distance						
Response frequency	800 Hz		800 Hz	400 Hz	350 Hz	200 Hz	
Power supply voltage	12 ~ 24 V d.c (Usable voltage range 5 - 35V d.c)						

Control output		Open/Close capacitance : 200 mA Max. (Resistive load), Residual voltage : Max 1.5 V					
Current consumption		Max 6 mA					
Operation indication		Red LED					
Protective circuit		Power reversely comeded productive circuit, surge prote ctive circuit and over current protective circuit are built in.					
connection structure		Cable type (standard cable length 2m), Relay connector type, Connector type					
Material		Case: stainless, Sensing surface: PBT, Cable holder: Polyester elastomer		Case: brass(chrome plating), Sensing surface: PBT, Cable holder: Polyester elastomer			
Weight	Cable type	approx. 60g	approx. 60g	approx. 70g	approx. 70g	approx. 120g	approx. 120g
	Relay connector type	None	None	approx. 30g	approx. 30g	approx. 80g	approx. 80g
	Connector type	None	None	approx. 30g	approx. 30g	approx. 60g	approx. 60g
Inductive D.C 3 Wire type							
Model	NPN	UP18RLM5N	UP18RLD8N	UP30RM10N	UP30RD15N	UP30RLM10N	UP30RLD15N
	PNP	UP18RLM5P	UP18RLD8P	UP30RM10P	UP30RD15P	UP30RLM10P	UP30RLD15P
	Size	M 18		M 30		M 30	
Shield		Shield	None shield	Shield	None shield	Shield	None shield
Standard sensing object (mm)		Iron 18 X 18 X 1	Iron 25 X 25 X 1	Iron 30 X 30 X 1	Iron 45 X 45 X 1	Iron 30 X 30 X 1	Iron 45 X 45 X 1
Sensing distance		5 mm	8 mm	10 mm	15 mm	10 mm	15 mm

Setting distance	0 ~ 4 mm	0 ~ 6.4 mm	0 ~ 8 mm	0 ~ 12 mm	0 ~ 8 mm	0 ~ 12 mm	
Hysteresis	Less than 10% of sensing distance						
Response frequency	350 Hz	200 Hz	250 Hz	100 Hz	250 Hz	100 Hz	
Power supply voltage	12 ~ 24 V d.c (Usable voltage range 5 - 35V d.c)						
Control output	Open/Close capacitance : 200 mA Max. (Resistive load), Residual : Max1.5 V						
Current consumption	Max 6 mA						
Operation indication	Red LED						
Protective circuit	Power reversely connected protective circuit, Surge protective circuit and over current protective circuit are built in.						
connection structure	Cable type (standard cable length 2m), Relay connector type, Connector type						
Material	Case : brass(chrome plating), Sensing surface: PBT, Cable holder: Polyester elastomer						
Weight	Cable type	approx. 140g	approx. 140g	approx. 170g	approx. 170g	approx. 220g	approx. 220g
	Relay connector type	approx. 100g	approx. 100g	approx. 130g	approx. 130g	approx. 180g	approx. 180g
	Connector type	approx. 80g	approx. 80g	approx. 150g	approx. 150g	approx. 200g	approx. 200g
Inductive D.C 2 wire type (Polarity/No polarity)							
Model	Polarity	UP8RM-1.5T	UP8RD2T	UP12RM2T	UP12RD4T	UP18RM5T	UP-18RD8T
	Non Polarity	-	-	UP12RM2U	UP12RD4U	UP18RM5U	UP-18RD8U

	Size	M8		M 12		M 18	
Shield		Shield	None shield	Shield	None shield	Shield	None shield
Standard sensing object (mm)		Iron 8 X 8 X 1		Iron 12 X 12 X 1		Iron 18X18X1	Iron 25X25X1
Sensing distance		1.5 mm	2 mm	2 mm	4 mm	5 mm	8 mm
Setting distance		0 ~ 1.2 mm	0 ~ 1.6 mm	0 ~ 1.6 mm	0 ~ 3.2 mm	0 ~ 4 mm	0 ~ 6.4 mm
Hysteresis		Less than 10% of sensing distance					
Response frequency		800 Hz		800 Hz	400 Hz	350 Hz	200 Hz
Power supply voltage		12 ~ 24 V d.c (Usable voltage range 10 - 30 V d.c)					
Control output		Open/Close capacitance : 100 mA Max.(Resistive load), Residual voltage: T (polarity) : max 3.5 V, U (No polarity): max5V					
Leakage current		Max 1 mA					
Operation indication		Red LED					
Protective circuit		Power reversely connected protective circuit, surge protective circuit and over current protective circuit are built in.					
connection structure		Cable type(standard cable length 2 m), Relay connector type, Connector type					
Material		Case: stainless, Sensing surface:PBT, Cable holder: Polyester elastomerr		Case: brass(chrome plating), Sensing surface: PBT, Cable holder: Polyester elastomer			
Weight	Cable type	approx. 60g		approx. 70g		approx. 120g	approx. 120g
	Relay connector type	None		approx. 30g		approx. 80g	approx. 80g

	Connector type	None		approx. 30g		approx. 60g	approx. 60g
Inductive D.C 2 wire type							
Model	Polarity	UP18RLM5T	UP18RLD8T	UP30RM10T	UP30RD15T	UP30RLM10T	UP30RLD15T
	Non Polarity	UP18RLM5U	UP18RLD8U	UP30RM10U	UP30RD15U	UP30RLM10U	UP30RLD15U
	Size	M 18		M 30		M 30	
Shield		Shield	None shield	Shield	None shield	Shield	None shield
Standard sensing object (mm)		iron 18 X 18 X 1	iron 25 X 25 X 1	iron 30 X 30 X 1	iron 45 X 45 X 1	iron 30 X 30 X 1	iron 45 X 45 X 1
Sensing distance		5 mm	8 mm	10 mm	15 mm	10 mm	15 mm
Setting distance		0 ~ 4 mm	0 ~ 6.4 mm	0 ~ 8 mm	0 ~ 12 mm	0 ~ 8 mm	0 ~ 12 mm
Hysteresis		Less than 10% of sensing distance					
Response frequency		350 Hz	200 Hz	250 Hz	100 Hz	250 Hz	100 Hz
Power supply voltage		12 ~ 24 V d.c (Usable voltage range 10 - 30 V d.c)					
Control output		Open/Close capacitance : 100 mA Max. (Resistive load), Residual voltage: T(Polarity) : max 3.5 V, U(No polarity) :max 5 V					
Leakage current		Max 1 mA					
Operation indication		Red LED					
Protective circuit		Power reversely connected protective circuit, surge protective circuit and over current protective circuit are built in.					
connection structure		Cable type(standard cable length2 m), Relay connector type, Connector type					
Material		Case: brass(chrome plating), Sensing surface: PBT, Cable holder : Polyester elastomer					

Weight	Cable type	approx. 140g	approx. 140g	approx. 170g	approx. 220g
	Relay connector type	approx. 100g	approx. 100g	approx. 130g	approx. 180g
	Connector type	approx. 80g	approx. 80g	approx. 110g	approx. 200g

Inductive A.C 2 wire type

Model	For A.C	UP12RM-2A	UP12RD-4A	UP18RM-5A	UP18RD-8A	UP18RLM5A
	Size	M 12		M 18		M18
S shield	Shield	None shield	Shield	None shield	Shield	
Standard sensing object (mm)	Iron 12 x 12 x 1 mm		Iron 18 x 18 x 1 mm	Iron 25 x 25 x 1 mm	Iron 18 x 18 x 1 mm	
Sensing distance	2 mm	4 mm	5 mm	8 mm	5 mm	
Setting distance	0 ~ 1.6 mm	0 ~ 3.2 mm	0 ~ 4.0 mm	0 ~ 6.4 mm	0 ~ 4.0 mm	
Hysteresis	Less than 10% of sensing distance					
Response frequency	20 Hz					
Power supply voltage	100 ~ 240 V a.c.(Usable voltage range 90 - 250 V a.c)					
Control output	Open/Close capacitance : 20.0 mA Max. (Resistive load), Residual voltage: Max 10 V					
Leakage current	Max 2.2 mA					
Operation indication	Red LED					
Protective circuit	Surge Protective circuit built in.					
connection structure	Cable type(standard cable length 2 m), Relay connector type, Connector type					
Material	Case: brass (chrome plating), Sensing surface:PBT, Cable holder :Polyester elastomer					

Weight	Cable type	approx. 70g	approx. 70g	approx. 120g		approx. 140g
	Relay connector type	approx. 30g	approx. 30g	approx. 80g		approx. 100g
	Connector type	approx. 30g	approx. 30g	approx. 60g		approx. 80g
Inductive A.C 2 wire type						
Model	For A.C	UP18RLD8A	UP30RM10A	UP30RD15A	UP30RLM10A	UP30RLD15A
	Size	M18	M 30		M 30	
S shield		None shield	Shield	None shield	Shield	None shield
Standard sensing object (mm)		Iron 25 x 25 x 1 mm	Iron 30 x 30 x 1 mm	Iron 45 x 45 x 1 mm	Iron 30 x 30 x 1 mm	Iron 45 x 45 x 1 mm
Sensing distance		8 mm	10 mm	15 mm	10 mm	15 mm
Setting distance		0 ~ 6.4 mm	0 ~ 8.0 mm	0 ~ 12.0 mm	0 ~ 8.0 mm	0 ~ 12.0 mm
Hysteresis		Less than 10% of sensing distance				
Response frequency		20 Hz				
Power supply voltage		100 ~ 240 V a.c.(Usable voltage range 90 - 250 V a.c)				
Control output		Open/Close capacitance : 200 mA Max. (Resistive load), Residual voltage: Max 10 V				
Leakage current		Max 2.2 mA				
Operation indication		Red LED				
Protective circuit		Surge Protective circuit built in.				
connection structure		Cable type(standard cable length 2 m), Relay connector type, Connector type				



Material		Case: brass (chrome plating), Sensing surface:PBT, Cable holder :Polyester elastomer				
Weight	Cable type	approx. 140g	approx. 170g	approx. 170g	approx. 220g	approx. 220g
	Relay connector type	approx. 100g	approx. 130g	approx. 130g	approx. 180g	approx. 180g
	Connector type	approx. 80g	approx. 150g	approx. 150g	approx. 200g	approx. 200g