



Shenzhen Hi-Link Electronic Co., Ltd

HLK-LD8001H Specification

Millimetre wave radar/ranging applications 80GHz 40m range radar module



1. Product overview

The **HLK-LD8001H** radar sensor is a radar module specially designed for hydrological detection. The module adopts FMCW mode, non-contact installation design, small size and compact structure. With high accuracy, low power consumption and strong anti-interference ability, it is suitable for water level monitoring in lakes and rivers, flash flood warning, reservoirs, sewage pipe networks and so on.

2. The main parameters of the product indicators

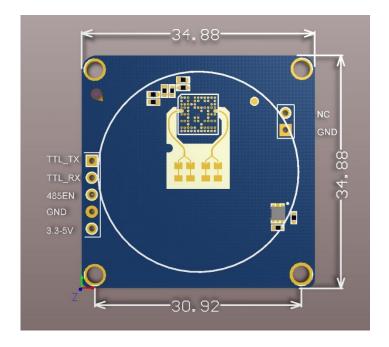
2. The main pa		r the produc			• 0	
					unit (of	
Parameter	Nnotation	Minimum	Typical	Maximum	measure)	Instructions
		Value	Value	Values		
Transmitters						
Frequency of emission	f	77		81	GHz	Bandwidth 4G
Output power (EIRP)	Pout		13	20	dBm	
Antenna angle (refer to Figure 4)						
Beamwidth (-3dB)	horizontal		±25		0	
	direction					
	vertical		±25		0	
	direction					
Beamwidth (-3dB)	horizontal		±3		0	
External Lens Antenna	direction					
	vertical		±3		0	
	direction					
Power supply						
Operating voltage	VCC	3.5	3.7	5	V	
Operating current	ICC		30		mA	typical value
Exports	UART output, default baud rate 115200, ASCII/Modbus protocol can be freely switched.					
Matrix						
Operating temperature	TOP	-45		+ 85	°C	
Module dimensions (L	35 x 35 x 1.2 mm					
x W x H)						
Weights	5 g					
Measurement Indicators:						
Range	0.15~40m					
Measurement accuracy	±5mm					
Resolution (of a photo)	1mm					
Start-up time	100ms Fastest					

Description:

The radar operates in the 80 GHz frequency band and has a range of 40 metres as the maximum range, which may vary depending on the size of the object's RCS.



3. Product specification and wiring definition

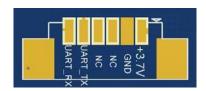


Module Dimension Drawing





Module front and back



Module Terminal Description



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