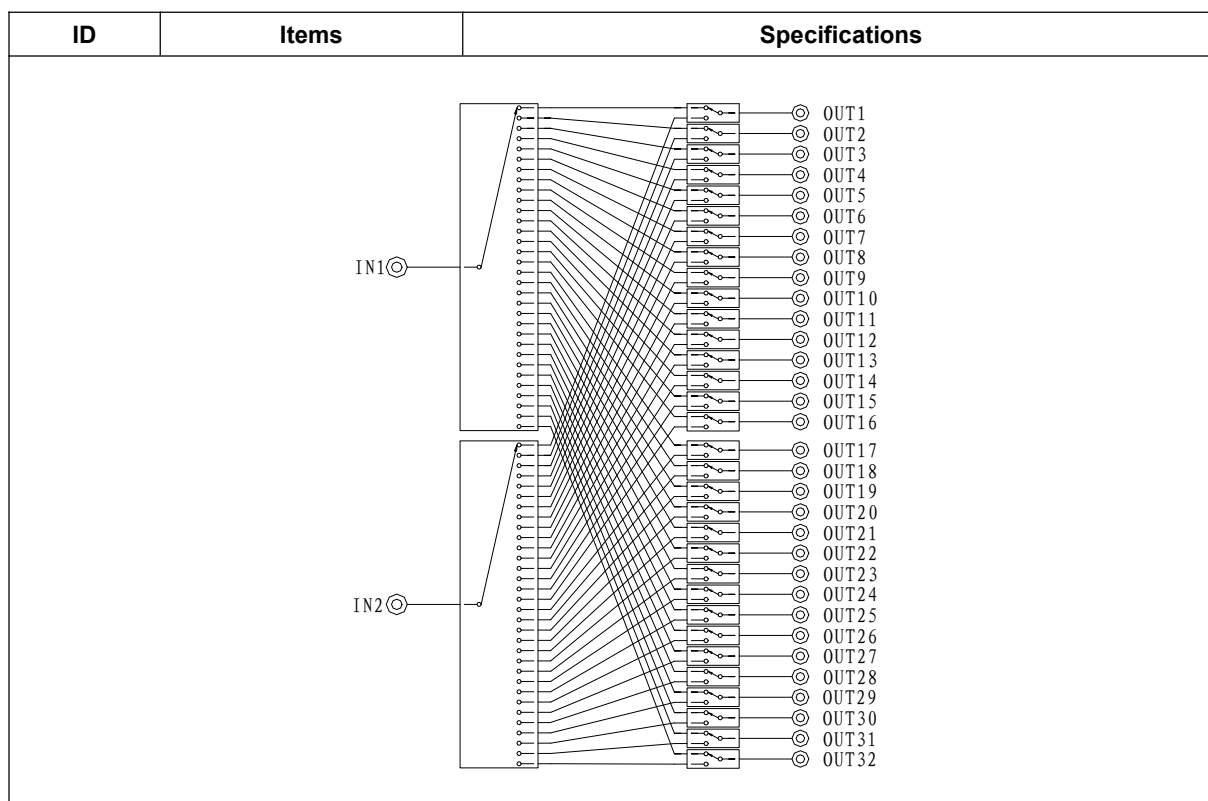


# HX232KGGF4081G Switch Matrix Module

## 1. Functional Diagram



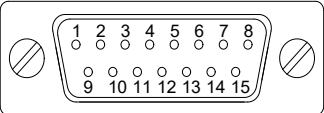
## 2. Description

ID	Items	Specifications
2-1	Type	Absorptive 2*32 Switch Matrix Module
2-2	Frequency Range	0.4 ~ 8GHz
2-3	Isolation	≥80dB
2-4	Insertion Loss	≤9.5dB
2-5	VSWR	≤1.8
2-6	Impedance	50Ω
2-7	RF Input Power	2W
2-8	Switching Speed	≤200ns
2-9	Input/Output Connectors	SMA-F
2-10	Control Connectors	DB15-male
2-11	Control	TTL=0 ~ 0.8V/3.3 ~ 5V
2-12	DC Power Supply	+5V/2.6A, -5V/0.6A

## 3. Environmental Specifications

ID	Items	Specifications
3-1	Operational Temperature	-40°C ~ +70°C
3-2	Storage Temperature	-55°C ~ +85°C

#### 4. Interface

ID	Items	Specifications
4-1	Control Connectors	DB15-male
		
4-2	NO	Specifications
	1、 2	+5V
	3	-5V
	4、 5	GND
	6	T1
	7	T2
	8	T3
	9	T4
	10	T5
	11	T6
	12	T7
	13	T8
	14	T9
	15	T10

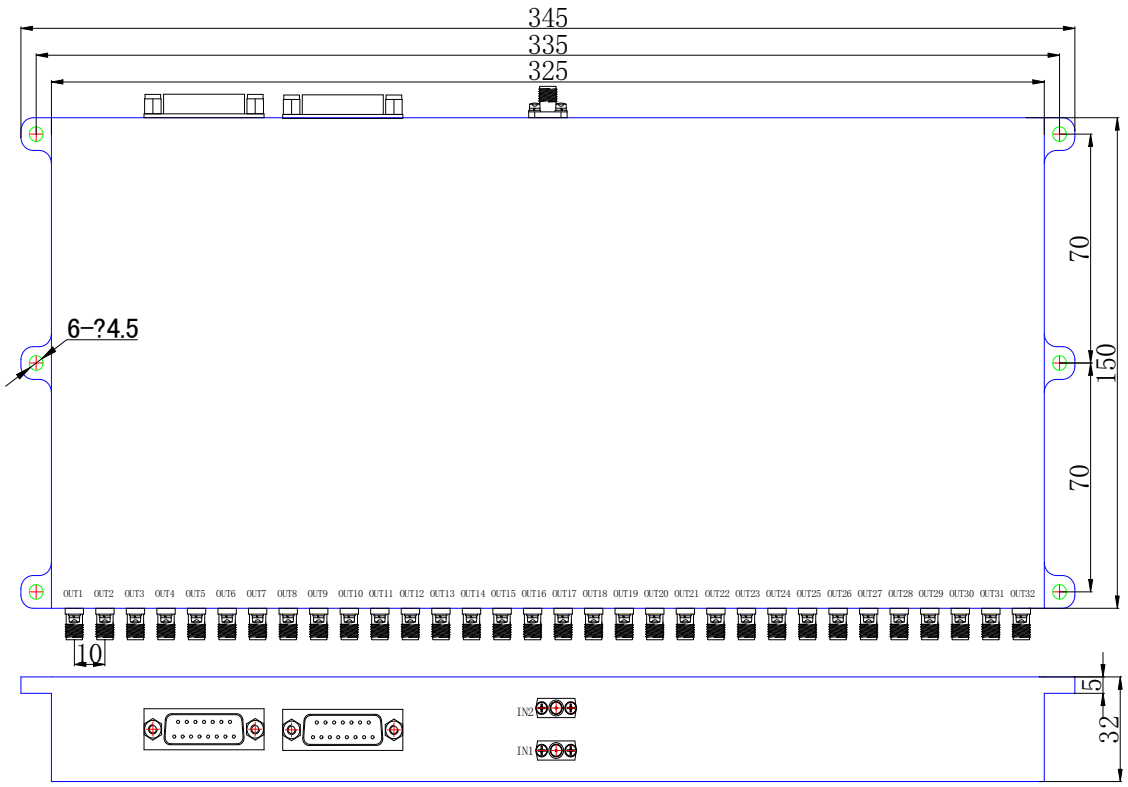
#### 5. Truth Table

T5	T4	T3	T2	T1	Signal Path State
0	0	0	0	0	IN1→OUT1
0	0	0	0	1	IN1→OUT2
0	0	0	1	0	IN1→OUT3
0	0	0	1	1	IN1→OUT4
0	0	1	0	0	IN1→OUT5
0	0	1	0	1	IN1→OUT6
0	0	1	1	0	IN1→OUT7
0	0	1	1	1	IN1→OUT8
0	1	0	0	0	IN1→OUT9
0	1	0	0	1	IN1→OUT10
0	1	0	1	0	IN1→OUT11
0	1	0	1	1	IN1→OUT12
0	1	1	0	0	IN1→OUT13
0	1	1	0	1	IN1→OUT14
0	1	1	1	0	IN1→OUT15
0	1	1	1	1	IN1→OUT16
1	0	0	0	0	IN1→OUT17

1	0	0	0	1	IN1→OUT18
1	0	0	1	0	IN1→OUT19
1	0	0	1	1	IN1→OUT20
1	0	1	0	0	IN1→OUT21
1	0	1	0	1	IN1→OUT22
1	0	1	1	0	IN1→OUT23
1	0	1	1	1	IN1→OUT24
1	1	0	0	0	IN1→OUT25
1	1	0	0	1	IN1→OUT26
1	1	0	1	0	IN1→OUT27
1	1	0	1	1	IN1→OUT28
1	1	1	0	0	IN1→OUT29
1	1	1	0	1	IN1→OUT30
1	1	1	1	0	IN1→OUT31
1	1	1	1	1	IN1→OUT32
<b>T10</b>	<b>T9</b>	<b>T8</b>	<b>T7</b>	<b>T6</b>	<b>Signal Path State</b>
0	0	0	0	0	IN2→OUT1
0	0	0	0	1	IN2→OUT2
0	0	0	1	0	IN2→OUT3
0	0	0	1	1	IN2→OUT4
0	0	1	0	0	IN2→OUT5
0	0	1	0	1	IN2→OUT6
0	0	1	1	0	IN2→OUT7
0	0	1	1	1	IN2→OUT8
0	1	0	0	0	IN2→OUT9
0	1	0	0	1	IN2→OUT10
0	1	0	1	0	IN2→OUT11
0	1	0	1	1	IN2→OUT12
0	1	1	0	0	IN2→OUT13
0	1	1	0	1	IN2→OUT14
0	1	1	1	0	IN2→OUT15
0	1	1	1	1	IN2→OUT16
1	0	0	0	0	IN2→OUT17
1	0	0	0	1	IN2→OUT18
1	0	0	1	0	IN2→OUT19
1	0	0	1	1	IN2→OUT20
1	0	1	0	0	IN2→OUT21
1	0	1	0	1	IN2→OUT22
1	0	1	1	0	IN2→OUT23
1	0	1	1	1	IN2→OUT24
1	1	0	0	0	IN2→OUT25
1	1	0	0	1	IN2→OUT26

1	1	0	1	0	IN2→OUT27
1	1	0	1	1	IN2→OUT28
1	1	1	0	0	IN2→OUT29
1	1	1	0	1	IN2→OUT30
1	1	1	1	0	IN2→OUT31
1	1	1	1	1	IN2→OUT32

## 6. Outline Drawing

ID	Items	Specifications
6-1	Outline Drawing	Unit: mm
Tolerances:±0.1mm		
 <p>The drawing shows a rectangular enclosure with a total width of 345 mm and a total height of 150 mm. The top edge has a chamfered corner with a radius of 335 mm. The bottom edge has a chamfered corner with a radius of 325 mm. The front panel features 32 output connectors labeled OUT1 through OUT32, spaced evenly along the bottom edge. The top panel has two input connectors labeled IN1 and IN2. The enclosure has a thickness of 5 mm. A hole with a diameter of 6-φ4.5 is located on the left side. The drawing also shows a detail of the connector pins and their arrangement.</p>		
6-2	Material	Aluminum
6-3	Finish	Nickel Plated
6-4	Weight	/

NOTE: ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.