

TAITIEN
Our Performance, Your Reputation

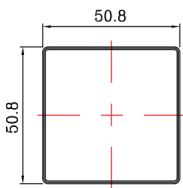
Actual Size

-

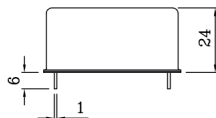
TYPICAL APPLICATION

- 5G Telecommunication, Base Station
- Smart Power Grid
- Test and measurement equipment

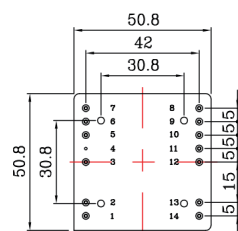
Standard footprint
[TOP VIEW]



[SIDE VIEW]

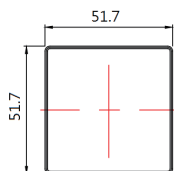


[BOTTOM VIEW]

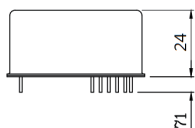


Pin#	Function
1	NC
2	NC
3	Vcc
4	GND
5	1PPS 1 lock Indicator 1 = Lock 0 = not locked
6	RX
7	TX
8	Enable 1 = 1 pps good, enable discipline 0 = 1 pps not good, do not discipline
9	NC
10	1 PPS input
11	GND
12	1 PPS output
13	GND
14	RF output

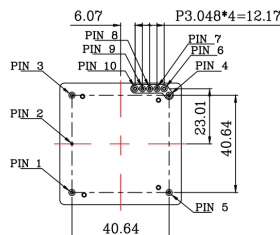
[TOP VIEW]



[SIDE VIEW]



[BOTTOM VIEW]



Pin#	Function
1	Enable 1 = 1 pps good, enable discipline 0 = 1 pps no good, do not discipline
2	GND
3	RF output
4	GND
5	Vcc
6	1PPS lock Indicator 1 = Lock 0 = not locked
7	TX
8	RX
9	1 PPS input
10	1 PPS output

ES France - Département RF & Hyperfréquences - 127 rue de Buzenval BP 26 - 92380 Garches
Tél. 01 47 95 99 60 - Fax. 01 47 01 16 22 - e-mail: hyper@es-france.com - Site Web: www.es-france.com

ELECTRICAL SPECIFICATION

1.RF OUTPUT

Parameter	Min.	Typ.	Max.	Unit	Test Condition
Frequency Output		10		MHz	5MHz is available. Consult factory for other frequency
Output Waveform		3.3V CMOS			Consult factory for another waveform
Load		10M Ω /10pF			
Rise/Fall Time			10	nS	
Output Level		V_{OL}	0.4	V	
		V_{OH}			
Duty Cycle	40		60		
Stability over Temperature			+/-0.1	ppb	-10°C ~ 70°C
Frequency Accuracy			+/-1	x10 ⁻¹²	24 hours average. Locked to 1pps.
24Hours Holdover			1.5	μ S	+/-10°C, after 7 days power on and 1 days discipline. Temperature variance below 1°C/Minute.
Acceleration Sensitivity			+/-1	ppb/g	Worst direction, consult factory for better sensitivity.

2.1pps Time Output

Parameter	Min.	Typ.	Max.	Unit	Test Condition
1pps		1		Hz	
Output Amplitude		3.3V CMOS			
Pulse Width		20		μ s	
Rise/Fall Time			10	ns	
Load		10M Ω /10pF			

3.1pps Time Input

Parameter	Reference Std.	Test Condition
1pps	1Hz	
Timing Edge	Rising edge	
Input Amplitude	3.3V CMOS	
Input Impedance	10M Ω /10pF	

4.Phase Noise (@10MHz)

Parameter	Min.	Typ.	Max.	Unit	Test Condition
1 Hz			-100	dBc/Hz	
10 Hz			-125	dBc/Hz	
100 Hz			-135	dBc/Hz	
1 KHz			-145	dBc/Hz	
10 KHz			-150	dBc/Hz	

5.Supply Voltage

Parameter	Min.	Typ.	Max.	Unit	Test Condition
Supply Voltage	4.75	5.0	5.25	Vdc	
Steady Power			2.55	W	at 25°C ambient
Warm up Power			8.8	W	Factory configurable
Warm up Time			5	Min.	To +/-5ppb. Factory configurable for fast warm up

Note: not all combination of options are available. Other specifications may be available upon request.

6. Digital Communication

Parameter	Reference Std.	Test Condition
Protocol	RS232	
Logic Level	3.3V CMOS	
Baud rate	57600 bps	

7. Environmental

Parameter	Reference Std.	Test Condition
Mechanical Shock	>30G, 11ms Half Sine	MIL-STD-202
Vibration	5G up to 2KHz	MIL-STD-202

Table 1 : ORDERING INFORMATION

DT-5151 Series Ordering Information	FootPrint	
	Standard (A)	Optional (B)
	DT-5151-A	DT-5151-B

Note: not all combination of options are available. Other specifications may be available upon request.