

# QFS-8000-18000-MP

## 8~18GHz

Features:  
 \* High Frequency Stability  
 \* Ultra Low Phase Noise

Applications:  
 \* Wireless  
 \* Transceiver  
 \* Laboratory Test  
 \* Radar

### Electrical

Output Frequency:	8~18GHz
Step:	5MHz
Switching Speed:	200µS max.
Output Power (J1):	10.5~15.5dBm @8~18GHz 11.5~14.5dBm @10~15.5GHz
Output Power (J2):	11~13dBm @100MHz reference
Output Power (J3):	-2~0dBm @100MHz reference
Output Spurious:	-60dBc max.
Output Harmonic:	-20dBc max.
Output VSWR:	2.5 max.
Output Phase Noise:	-80dBc/Hz max. @1KHz
Internal Reference:	100MHz
Reference Phase Noise:	-125dBc/Hz max. @100KHz -155dBc/Hz max. @1KHz -160dBc/Hz max. @10KHz -165dBc/Hz max. @100KHz -165dBc/Hz max. @1MHz
Voltage:	+6V @1.2A +5V @0.6A
Control Type:	Parallel port
Impedance:	50Ω

### Mechanical

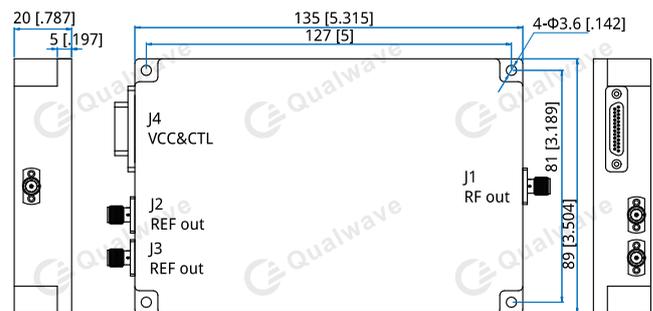
Size*1:	135*89*20mm 5.315*3.504*0.787in
RF Connectors:	SMA female
Power & Control Interface:	J30J-25ZKP
Mounting:	4-Φ3.6 Through hole

[1] Exclude connectors.

### Environmental

Operating Temperature:	-40~+85°C
Non-operating Temperature:	-55~+85°C

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±0.2mm [±0.008in]

### Pin Numbering

Pin	Symbol	Name	Pin	Symbol	Name
1	BIT_100M_J2_Power	“1” : J2 Power≥11dBm “0” : J2 Power≤6dBm	14	CH10	Frequency Control BIT
2	BIT_Freq_Lock	“1” : Locked; “0” : Unlocked	15	CH11	Frequency Control High BIT
3	Freq Latch_N	Frequency Setting Latch BIT	16	GND	-
4	CH0	Frequency Control Low, BIT/Power Down N “1” : ON; “0” : OFF; NC: OFF	17	Control Latch_N	Power State Setting/Frequency OFF Latch BIT
5	CH1	Frequency Control, BIT/Frequency OFF N “1” : ON; “0” : OFF; NC: OFF	18	+6V	-
6	CH2	Frequency Control BIT	19	+6V	-
7	CH3	Frequency Control BIT	20	GND	-
8	CH4	Frequency Control BIT	21	GND	-
9	CH5	Frequency Control BIT	22	BIT_RF_J1_Power	“1” : J1 Power≥10.5dBm

10	CH6	Frequency Control BIT	23	BIT_100M_J3_Power	"0" : J1 Power≤5.5dBm "1" : J3 Power≥-2dBm "0" : J3 Power≤-7dBm
11	CH7	Frequency Control BIT	24	GND	-
12	CH8	Frequency Control BIT	25	+5V	-
13	CH9	Frequency Control BIT			

Control Latch_N	Freq Latch_N	CH0	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	Module State (Output)	
0	0	Any State Setting Value											NOT RESPONDING		
0	↑ 1	Any State Setting Value											Power State and RF (on/off) not change, but Freq. change by CHx value		
↑ 1	0	0	X	Any State Setting Value											Power Down
↑ 1	0	1	0	Any State Setting Value											Power ON, RF OFF
↑ 1	0	1	1	Any State Setting Value											Power ON, RF ON Output=the last state

Note: ↑: the rising edge.

### How To Order

[QFS-8000-18000-MP](#)

Customization is available upon request.