# TMRJ-HF18G186-7200-S

RF Rotary Joint Slip Ring, Single Channel DC~18GHz, OD 86mm, SMA female

#### **FEATURES**

- Low Contact Resistance
- Large Volume Data Transmission without Delay
- Long Lifetime

#### **APPLICATIONS**

- Radar Antennas
- Satellite Communication Systems
- Medical Treatment Equipment
- Robotics

**Connector Type** 



Electrical Specifications[Rotary Joint]		
Frequency	DC~18GHz	
VSWR	$1.3 \text{ max@DC}{\sim} 10 \text{GHz}$	
	1.4 max@10~18GHz	
VSWR Ripple	0.05 max	
Insertion Loss	0.25dB@DC~10GHz	
	0.3dB@10~18GHz	
Insertion Loss Ripple	0.05dB max	
Phase WOW	1° max	
Average Power	500W max@1GHz	
	200W max@6GHz	
	100W max@12GHz	
	30W max@18GHz	
Peak Power	3kW max	
Protection Degree	IP 40 acc. EN 60529	

Working Life	10 Million Revs
Rotating Speed	250 rpm max
Starting Torque	0.5N.cm max
Rotating Torque	0.5N.cm max
Connector Axial Load	$\pm 0.1N$ max
Connector Radial Load	$\pm 0.1N$ max
Contact Material	PTFE

Mechanical Specifications[Rotary Joint]

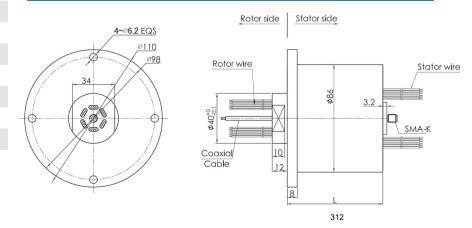
SMA female

Operating Humidity	0∼85%RH
Operating Temperature	-55°C~+85°C
Storage Temperature	-55°C~+85°C

Specifications[Slip Ring]	
Voltage Range(power)	0~440VAC/VDC
Voltage Range(signal)	0~240VAC/VDC
Insolution Resistance(power)	≥500MΩ@500VDC
Insolution Resistance(signal)	≥300MΩ@300VDC
Lead Cable Size(power)	AWG#17 Silver-plated teflor
Lead Cable Size(signal)	AWG#22 Silver-plated teflor
Lead Cable Length	Standard 250mm(rotor/state
Dielectric Strength	300VAC@50Hz, 60s
Dielectric Noise	$0.01\Omega$ max
Working Life	10 Million Revs
Rotating Speed	250 rpm max
Contact Material	Gold-Gold
Housing Material	Aluminum alloy
Temperature	-30°C~+80°C
Operating Humidity	0~85%RH
Torque	0.05N.m+0.01N.m/6 chann

### **Dimensions**[mm]

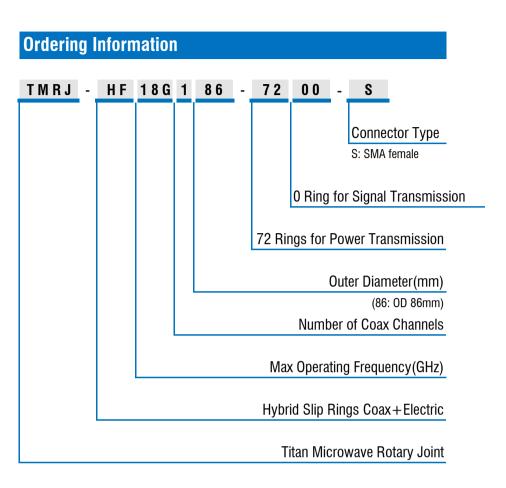
**Protection Degree** 



IP51

## TMRJ-HF18G186-7200-S

RF Rotary Joint Slip Ring, Single Channel DC~18GHz, OD 86mm, SMA female



♦ Customization is available upon specific requests