

7-7004

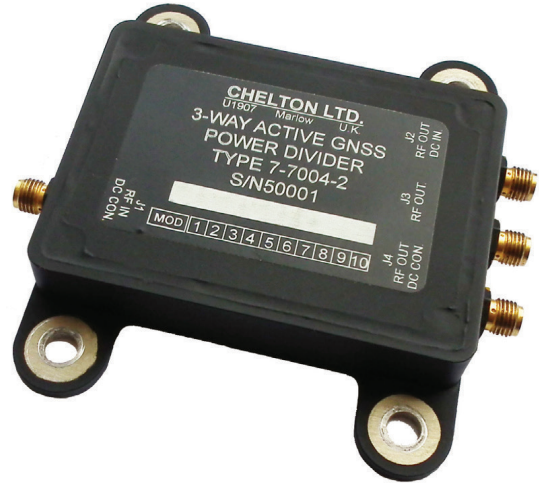
CHELTON

Three-Way Active GNSS Power Divider

The 7-7004 is an active three-way RF power divider with internal amplification and DC pass through. It is designed for use with Global Navigation Satellite Systems (GNSS).

The power divider is housed in a sealed, machined aluminium box and has four SMA RF connectors, one input and three outputs.

One output connector supplies power to the internal amplifier. The second output connector is DC blocked. The third passes current to the RF input connector in order to power an external active GNSS antenna, if required



ELECTRICAL

The electrical specifications valid over the temperature range -40°C to +70°C

Frequency	1164 MHz - 1620 MHz
Gain	The nominal gain from port J1 to ports J2, J3 and J4 is defined by the part number suffix. Part Number Gain (dB) 7-7004-X X ± 1.25 X is in the range 1 to 6
Noise Figure	The maximum noise figure from port J1 to ports J2, J3 and J4 is defined by the part number suffix. Part Number Noise Figure (dB) 7-7004-1 ≤ 4.0 7-7004-Y ≤ 3.5 Y is in the range 2 to 6
Power Rating	4.5 V to 5.5 V, 30 mA
Impedance	50 ohm nominal
VSWR	≤ 2.0:1 on all ports
Isolation between outputs J2, J3 and J4	> 17 dB
Connectors	J1 RF IN: SMA Female J2, J3, J4 RF OUT: SMA Female

MECHANICAL

Dimensions (mm)	15.0 x 87.5 x 75.5 (maximum)
Weight (kg)	0.13 (maximum)
Mounting Configuration	4 holes fixed location

ENVIRONMENTAL

Temperature / Altitude	RTCA DO-160F, Section 5, Category B
Temperature Ranges	Operational: -40°C to +70°C Storage: -55°C to +85°C
Altitude	Operational: 7620 m Storage: 7620 m
Pressure Variation	Descent: 365.8 m/min Climb: 609.6 m/min
Temperature Variation	RTCA DO-160F, Section 5, Category B
Vibration	RTCA DO-160F, Section 8, Paragraph 8.5.1, Curve L extended to 500 Hz
Shock	RTCA DO-160F, Section 7, Category B
Acceleration	MIL-STD-810G, Method 513.6, Procedures I and II
Humidity	RTCA DO-160F, Section 6, Category A
EMC	RTCA DO-160F
Magnetic Effect	Section 15, Category A
Emission of Radio Frequency Energy	Section 21, Category M

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