

rf/microwave instrumentation

Model IT2000 Series Remotely Switchable Isolated Impedance Transformer

Model IT2000 Series consists of switchable transformers for high power ultrasonic and RF transducer applications, as well as other laboratory applications requiring a broadband, high power, impedance matching system. These transformers are designed to provide DC isolation while passing RF power over the specified frequency range. The output impedances are based on a 50 ohm source and can be remotely selected via commands received from the Model 800A3. The IT2000 Series allows fast remote switching to accommodate broadband matching to various load impedances.

SPECIFICATIONS

Frequency	See Model Configurations
Input Impedance	50 Ohms nominal
Output Impedance	See Model Configurations
Connectors Input Output Control Cable Included	High Voltage Terminals
Size (W x H x D approx)	26.2 x 11.7 x 21.6cm (10.3 x 4.6 x 8.5 in)
Weight (approx)	4.5kg (10 lbs)

Model IT2001	Model IT2002
Output Impedance (OHMs) ±10%	Output Impedance (OHMs) ±10%
10kHz–20kHz, 800 watts	100kHz-3MHz, 1500 watts
20kHz–3MHz, 1500 watts	
8	50
12.5	100
25	200
50	450
100	900
200	1800
400	
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NOTE: The IT2000 Series transformers are untuned in order to deliver the broadest bandwidth possible. Like all real, physical transformers, they have inherent losses and reactances which become more prominent as the selected tap gets further from the characteristic 50 ohms. Optimal performance can be achieved by tuning the load for each impedance and frequency of operation. A matching network at the load can reduce the reflected power (increasing the delivered power) from the source, to the transformer, and in turn, to the load.