

The **Black Star 1325** measures frequency and period from 5Hz to 1.3GHz. The microprocessor controlled reciprocal measurement technique gives a fast response and high resolution at all frequencies.

Specifications

Input Ranges

Frequency A: 5Hz to 25MHz
 Period A: 200ms to 40ns
 Frequency B: 20MHz to 1.3GHz

Sensitivity

Input A: <30mV to 20MHz
 <35mV to 25MHz
 Impedance: 1M/25pf, AC coupled
 Input B: <15mV to 700MHz
 <50mV to 1.3GHz
 Impedance: nominally 50R

Maximum Input Voltage

Input A: 30V DC or AC peak
 Input B: 30V Dc or AC peak at 50/60Hz decreasing to 1V rms above 1MHz

Resolution

Input A:

Frequency	Digits of Resolution vs gate time		
	0.1s	1.0s	10s
5Hz to 25MHz	5	6	7
1MHz to 10MHz	6	7	8
10MHz to 25MHz	7	8	9

Input B:

Frequency	Digits of Resolution vs gate time		
	0.1s	1.0s	10s
20MHz to 100MHz	5	6	7
100MHz to 1GHz	6	7	8
1GHz to 1.3GHz	7	8	9

Note: Hysteresis is added to all ranges to prevent display flicker, e.g. 999.99Hz changing to 1KHz will be displayed as; 999,99Hz and 1000.00Hz. 1kHz will normally be displayed as 1.0000kHz

Timebase

Frequency: 10MHz
 Setability: +/-1ppm
 Temp Coefficient: +/-10ppm from -10°C to +70°C
 Ageing: <5ppm/year

Other Functions

Display Hold, Min/Max, HF Reject

Power Requirements

Battery: 6 x disposable 'C' cells.
 Battery life minimum 70 hours, typically 200 hours.
 (Batteries not included)
 Mains: 220 to 240V AC +/-10% 50 - 60Hz

General

Operating Temp: +5°C to +40°C 20% to 80% RH.
 Storage Temp: -20°C to +60°C
 Size: 219 x 240 x 98mm (product only)
 Weight: 1.4kg (product only)

Options

Option 1: RS232, External Clock Input (TTL)
 RS232 interface provides complete control of all of the

Option 2:

frequency counter functions, and retrieval of displayed reading. Baud rate is 2400.

RS232, TCXO, External Clock Input (YTTL)

Frequency: 10MHz

Temp Coefficient: +/-1ppm 0°C to +50°

Stability: +/-0.2ppm

Ageing: <1ppm / year