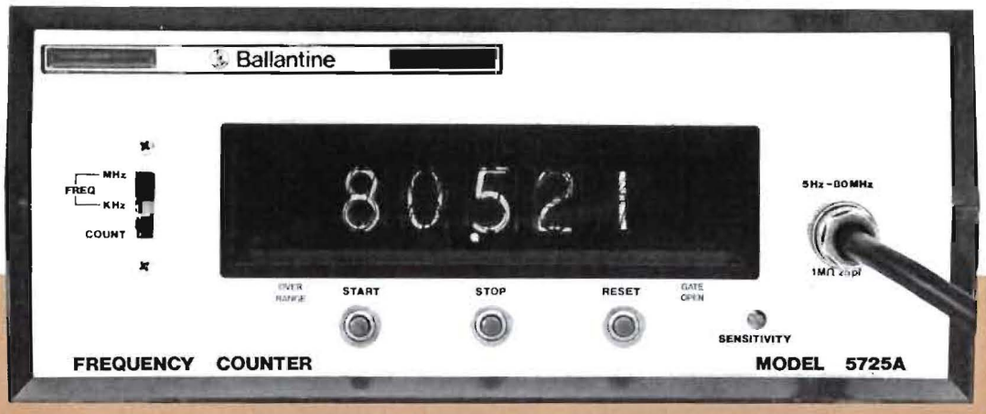
ECONOMY 80 MHz FREQUENCY COUNTER 5725A

- Provides Frequency, Totalize, & Ratio Capability
- Display Storage



- ☐ EASY TO OPERATE–NOT A KIT
- ☐ EASY TO READ–1/2" HIGH, NO-BLINK NUMERALS
- ☐ EASY TO USE–FEW SIMPLE CONTROLS
- ☐ DIRECT READING–5 DIGITS IN KHz & MHz
- ☐ SMALL & LIGHT–4 LBS.– 8" W x 3 1/4" H x 7 3/8" D
- ☐ LOW COST–$325.00
- ☐ WIDE APPLICATION–RATIO CAPABILITY
- ☐ QUANTITY & OEM PRICING AVAILABLE
- ☐ HIGH RELIABILITY–SCHOTTKY TTL IC's, MSI's, LONGLIFE DISPLAYS

The Economy 5725A Frequency Counter is the lowest priced, highest performance-to-value, portable, fully assembled and operating instrument in its category today. It has been designed for general purpose application in industrial, communications and laboratory measurements. Frequency is read directly, to 5 places, in KHz and MHz, with simple switch selection, over the very broad range of 5Hz to more than 80MHz. The 5725A time-base is derived from a 1MHz crystal with a <2ppm per month aging rate specification. Totalizing is accomplished in the Count Mode with pushbuttons providing Start, Stop, and Reset functions. The Economy 5725A also makes Ratio measurements with its capability to accept external clock signals from approximately 10KHz to 2MHz.

Controls and inputs are easy to understand and use, making the 5725A a simple unit to operate. Separate LED indicators display Gate operation, or the occurrence of Over Ranging. The sensitivity of 75mV to 40MHz and 120mV to over 80MHz is superior to lower gain competitive units, and minimizes the need for conditioning low level signals. Screwdriver adjustment of sensitivity is provided on the front panel. Five gas discharge display tubes show bright half-inch high numerals, comfortably readable up-close or at a distance, and display storage provides steady non-blinking indications changing only when up-dating is needed.

Built for rugged use, packaged in a high-impact strength case, rack mountable for systems use, the 5725A Economy Frequency Counter is meant for long trouble free performance in lab, factory, or field environments. Its low 10 watt power requirement makes it operable from car batteries, or other DC sources, with practically any inverter. Compare bandwidth, sensitivity, functions available, convenience, readability, construction, reliability and there can be but one choice – the Ballantine Economy Model 5725A priced at $325.00.

OEM/QUANTITY DISCOUNTS

Qualified Original Equipment Manufacturers, or large quantity users can obtain further significant savings with a price schedule available on a Purchase Agreement. Contact Ballantine's marketing department for details. Ten day evaluation loaner sent on receipt of your memo purchase order.

BALLANTINE LABORATORIES, INC.

FOUR DECADES OF INNOVATION IN ELECTRONIC INSTRUMENTATION

FREQUENCY MODE

Input: Via front panel BNC connector
Frequency Range: 5 Hz to 80 MHz
Gate Time: 1 msec or 1 sec
Accuracy: ±1 count ± time base accuracy
Readout: KHz or MHz with positioned decimal point

COUNT MODE

Input: Via front panel BNC connector
Frequency Range: 5 Hz to 80 MHz
Counter Range: 1 to 10^5 counts
Gate Time: Manually selected. When the START pushbutton is pressed, the count is initiated and continues. When the STOP pushbutton is pressed, the count stops and the display holds the number accumulated.
Accuracy: Absolute
Readout: Dimensionless

FREQUENCY RATIO MODE

Input (F1): Front panel BNC connector
Input (F2): Rear panel BNC connector
Measures: F1/F2 with the FREQ switch set to MHz and (F1/F2) X 10^3 when set to KHz
Number of cycles of F2 averaged: 10^3 with the FREQ switch set to MHz and 10^6 when set to KHz
Readout: Dimensionless

INPUT CHARACTERISTICS

FRONT PANEL

Impedance: 1 Megohm shunted by 25pF approx.
Input Coupling: AC
Frequency Range: 5 Hz to 80 MHz
Sensitivity: 75 mV rms from 5 Hz to 40 MHz increasing to 120 mV rms at 80 MHz
Maximum Input: 250 V rms 5 Hz to 1 KHz. 10 V rms above 10 MHz. Sensitivity control provided as screwdriver adjust on front panel

REAR PANEL

Input Requirement: Standard TTL (nominally 1 V to 5 V p-p), DC coupled
Frequency Range: DC to 5 MHz

OUTPUT CHARACTERISTICS

Frequency: 1 MHz (from Int. Crystal Osc.)
Amplitude: 5 volt approx.
Coupling: DC
Output Impedance: 1 Kohm when "low" and 1.5 Kohm when "high"

DISPLAY CHARACTERISTICS

Type: 5 long-life glow discharge display tubes
Display Storage: Prior reading is held while new reading is being made. Time between successive measurements is 100 msec. The storage is disabled in the COUNT mode.
Gate: LED indicator, lights up when the counter gate is open
Decimal Point: Fixed for readings in KHz and MHz
Overrange: LED indicator, lights when the counter capacity is exceeded
Manual Reset: Front panel pushbutton switch resets the display and all registers to zero

TIME BASE

Crystal Frequency: 1 MHz
Aging Rate: Less than 2 parts in 10^6 per month
Temperature Stability: Less than 5 parts in 10^7 per °C from 0 to 40°C

GENERAL

Height: 3¼" (83mm)
Width: 8" (203mm)
Depth: 7 3/8" (188mm)
Weight: 3 lbs. 9 oz. (1.6 kg)
Power Requirements: 115 or 230 volt rms ±10%, 48 to 65 Hz, 10 watts approx.
Temperature Range: 0°C to 40°C

ACCESSORIES AVAILABLE

Description	Part No.	Price
Probe Kit, 10X Attenuator, 6 ft.	10601A	$32.00
Cable, coax, RG58C/U, BNC/BNC, 4 ft.	12249D	7.50
Cable, coax, RG58C/U, BNC/Alligator, 4 ft.	12250D	8.50
Termination, feedthrough, 50 ohm, BNC/BNC	12630A	12.50
Filter, low pass (1 kHz)	12631A	35.00
Rack Mounting Kit for 1 or 2 5725A Side/Side	800-05	40.00
Half-Rack Cover for 800-05	381000051L	10.00

MODES OF OPERATION

FREQUENCY

Measures average frequency of signals from 5Hz to over 80MHz connected to front panel BNC. Referenced to internal 1MHz crystal clock (or external clock). With panel FREQ switch set to MHz, readout is 5 digit with decimal point – resolution 1KHz. With switch on KHz, display is 5 digits – resolution 1Hz. Overrange LED indicates if 99.999 capacity is exceeded. If 1Hz resolution is needed on frequencies being read on MHz setting (1KHz resolution), read first five places on the MHz setting, switch to KHz, (LED overrange will light), and read the last 3 places (100, 10, and 1 Hz) on KHz display – this provides an 8 digit readout with 1 Hz resolution to over 80MHz.

COUNT

Operates as straightforward total events counter on signals applied to front panel BNC with slide switch set on Count. Gate time controlled by START/STOP pushbuttons. Display stored when stopped; if started without resetting, count continues cumulative from previous stored reading. RESET button clears display to all zeroes.

RATIO

Measures ratio of signal F1 (5Hz to over 80MHz) at front panel BNC, to signal F2 (approximately 10KHz to 2MHz) at rear panel BNC with rear switch set to EXTERNAL clock. Display is ratio F1/F2 with front panel FREQ at MHz setting, and (F1/F2) X 10^3 with KHz setting.

NOTES

1) With rear panel switch on INTERNAL clock, the 1MHz internal crystal clock frequency is available at the rear BNC for use as a quick "confidence" check of the 5725A, or to clock other instruments.

2) With the rear switch on EXTERNAL clock, rear BNC can be used for input of signal F2 for ratio measurements as described, or except external clock signal for higher stability, or other special time bases.

PRICE: $325.00 f.o.b. Boonton, NJ

OEM/Quantity Discounts to qualified users on price schedules available with firm Purchase Agreement. Check Ballantine Marketing Department for details.

BALLANTINE LABORATORIES, INC.
P.O. Box 97, Boonton, New Jersey 07005, U.S.A., Phone (201) 335-0900, TWX (710) 987-8380
Four Decades of Innovation in Electronic Instrumentation

U.S. Sales prices f.o.b. Boonton, New Jersey.
Specifications and prices subject to change without notice.

10/72 Printed in U.S.A.