**IST MODEL 5800/5850**

**TECHNICAL SPECIFICATIONS**

### AUTO-RANGING COUNTER:

- **Input Characteristic:**
  - Impedance: 100kΩ
  - Coupling: AC
  - AC line noise input: 4.0mVrms

- **Triggering Threshold:**
  - Selectable for TTL, CMOS logic threshold or 0–3.3V
  - Adjustable triggering level

### FREQUENCY COUNTER (Display shown “Ext. CNT”)

- **Ranges:** 2 kHz to 50 MHz Autoranging
  - Resolution: 0.1 Hz
  - Accuracy: 0.5%

### TIME BASE COUNTER (TOTAL) (Display shown “Ext. CNT/10M”)

- **Ranges:** DC to 500MHz
  - Max. Display: 3 digits

### INPUT PROTECTION:

- **Input Range:** ≤ 2.5A
  - ≤ 1.5A

### OUTPUT CURRENT:

- **Max.:** 1.0A
  - Short Circuit, Overcurrent, Overvoltage

### VOLTAGE COUNTER

- **Max.:** 5.0A

### TRIPLE OUTPUT DC POWER SUPPLY:

<table>
<thead>
<tr>
<th>Output Voltage</th>
<th>Min.</th>
<th>Max.</th>
<th>% of Full Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 V</td>
<td>±10%</td>
<td>±10%</td>
<td>±10%</td>
</tr>
<tr>
<td>5 V</td>
<td>±10%</td>
<td>±10%</td>
<td>±10%</td>
</tr>
<tr>
<td>10 V</td>
<td>±10%</td>
<td>±10%</td>
<td>±10%</td>
</tr>
</tbody>
</table>

### FUNDAMENTAL CHARACTERISTICS:

- **SWEEP PERFORMANCE**
  - **Source:** Continuous, Linear
  - **Range:** 10Hz to 100kHz

### AM MODULATION CHARACTERISTICS:

- **Source:** Internal
  - **Ratio:** 0.1% to 100% modulation
  - **Deviation:** ±5V

### FM MODULATION CHARACTERISTICS:

- **Source:** Internal
  - **Deviation:** ±10% of internal tone

### FREQUENCY CHARACTERISTICS:

- **Max.:** 35MHz (with probe miniature clip to ground)

### DISPLAY CHARACTERISTICS:

- **Max.:** 6 digits

### RESOLUTION:

- **Max.:** 4 digits

### TIME BASE CHARACTERISTICS:

- **Max.:** 6 digits

### PUZZLE CHARACTERISTICS:

- **Max.:** 4 digits

### TRIPLE OUTPUT DC POWER SUPPLY:

### PHYSICAL PROPERTIES:

- **Dimensions:** 13” x 9” x 8.75”
- **Shipping Weight:** 7.5 lbs (3.4 kg)

### INFORMATION SCAN TECHNOLOGY, INC.

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The IST-5800 series programmable multifunction generator is an exceptionally versatile and economical instrument for applications in R&D, Manufacturing Test, Service Repair and Training. Featuring an adjustable triple output power supply and waveform generator, it has the ability to provide power and signal sources for a circuit while the universal logic probe, auto-ranging frequency counter, and digital multimeter allows you to simultaneously analyze and measure circuit activity. This compact device combines the functionality of five standard laboratory instruments into one integrated unit, making the task of testing, troubleshooting, and measuring component responses as easy as pressing a button.

Five instruments in one!

- 20 MHz Sweep/Function Generator
- 35 MHz Universal Logic Probe
- 80 W Adjustable Triple Output Power Supply with Display
- Autoranging frequency, Period, Totalize Counter
- Autoranging Digital Multimeter

*Note: Only the IST-5850 model comes equipped with a power supply.*
INTRODUCING THE VERSATILE 5-IN-1 IST-5800 SERIES PROGRAMMABLE MULTIPLE FUNCTION GENERATOR

FEATURES:

System Integration:
For unparalleled convenience, the IST-5800 Series integrates five different instruments into one unified system, ground, eliminating ground loop currents to provide accurate and hassle-free measurements.

User Friendly Interface:
The IST-5800 Series elaborately designed software interface allows for one touch access to adjusted quantities from previously used functions. Switch functions with the press of a key and use the digital encoder to make new adjustments on up to eighteen saved quantities.

Cost Effective:
Integrating the circuitry of five different testing instruments into one multifunctional device enables IST to deliver all this functionality for the price of one.

Memory Backup:
The Memory Backup feature allows the IST-5800 Series to work just like a conventional mechanical switch operated instrument. All previous modes, settings, and quantities adjustments are restored immediately after power up. Up to ten different data programs can be stored to memory, allowing quick changes from one operation to another.

LCD Back-Light Display:
The IST-5800 Series high brightness, uniform cold cathode fluorescent lamp back-lighting provides a high contrast display that’s easily readable from multiple angles and even from a distance.

RS-232C Serial Port:
A built-in RS-232C serial port enables network connectivity. Use the IST-5800 Series over a network to perform remote monitoring or control of sensors or actuators in corrective or analysis applications. In training applications, multiple units can be set-up through the network by an instructor.

Auto Frequency Locking Capability:
Unlike conventional function generators, the output frequency of the IST-5800 Series can be automatically locked within +/-0.1% range at the tuned frequency, without drifting problems due to effects of temperature, moisture or component degeneration.

Multi-Function Simultaneous Operations:
For most uses, the IST-5800 Series is capable of performing multiple testing operations simultaneously. (Example: The IST-5850 can output a signal from the function generator, while the logic probe shows logic activity, the autoranging DVM displays the voltage and the power supply delivers the appropriate power to the circuit being tested. The frequency measurement can also be implemented with a keystrode.)

Mountable Accessories Pouch:
Keep accessories organized in one place with the convenient storage pouch mounted on the top of the instrument case.