

# CURRENT PULSE GENERATOR

## 25V

- Applications:**
- \* Current Testing
  - \* Voltammetry
  - \* Coulometry
  - \* Polarization
  - \* Corrosion
  - \* Physical Electrochemistry

### Applications

This model is designed to provide a Current Pulse Generator instrument for demanding electrochemical applications. It is ideal for fundamental electrochemical studies in areas as diverse as physical electrochemistry, voltammetry, coulometry, automatic polarization and other studies. This unit provides a combination of blazing speed, a wide current range, low noise, high sensitivity, and unsurpassed versatility.

### Performance

The N600-HC113 model features an output voltage of 25V, a fast rise and drop time (< 3usec), independent control for pulse width and pulse repeating period (with 5-digit digital thumbwheel switches), an error light, an external trigger input, adjustable delay time, and a trigger output. Its performance and ease of operation make it well-suited to solution resistance measurements (by Current Interrupting Technique) and for double-layer capacitance measurements.

### Design

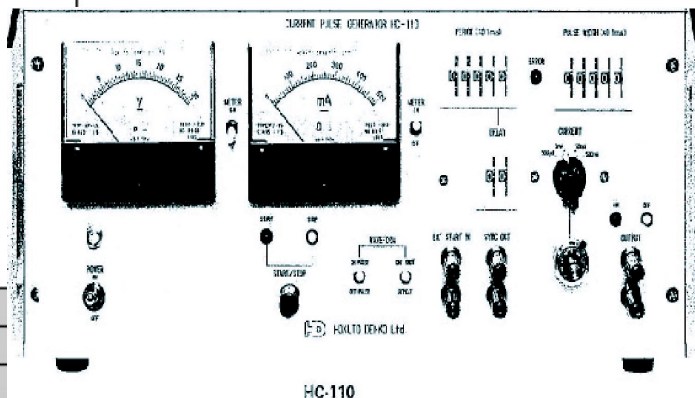
Despite these impressive specifications, the N600-HC113 is surprisingly compact. Hundreds of components in each model are built into an instrument that measures 44cm x 19.5cm x 39cm (WxHxD) and weighs 21.4 kilograms. HD engineers worked long and hard to build a compact instrument without sacrificing functionality or reliability. As a result, the Model N600-HC113 is a world-class research Current Pulse Generator that occupies minimum bench space.

### Specifications

Constant Pulse Generator	
Maximum Output Voltage	25V
Output Current Ranges	10mA, 100mA, 1A, 10A
Setting (Coarse)	A desired current range can be selected (4 ranges)
Setting (Fine)	X0.1 ~ X1.1 (attenuation calibration Potentiometer)
Pulse Width (Range)	100µsec~ 9.9999sec (settable with a 5-digit digital switch)
Pulse Period (Range)	100µsec~ 9.9999sec (settable with a 5-digit digital switch)
Delay Time (Range)	1µsec ~ 99µsec (pulse period ranging 100µsec~900µsec) 10µsec ~ 990µsec (pulse period ranging 1msec~9.9msec) 100µsec ~ 9.9msec (pulse period ranging 10msec~99.9msec) 1msec ~ 99msec (pulse period ranging 10msec~99.9msec) 100msec~999.9msec 10msec ~ 990msec (pulse period ranging 1 sec~9.9999sec)
Delay Time (Setting)	A 2-digit digital thumbwheel switch
START	Selectable, Manual/External (External Trigger Input)
Output Form	Selectable, REPEAT/ONE SHOT
External Trigger Input	Pulse with +2V/peak required
Trigger Output	The HC-series supplies a pulse signal (>or= +2V)
Indications - Error	LED lamp turns on for error setting
Indications - ON	LED turns on when current pulse is being generated
Indications - OFF	LED turns on when current is off
Indications - STOP	LED turns on for standby mode
Indications - START	LED turns on for operation mode
Voltmeter, Ammeter	Both ±1.5% accuracy
Power Requirement	AC120V, 60Hz
Physical Dimension	440mm x 195mm x 390 mm (WxHxD)
Weight	21.4kg

### Features

- Output Voltage: 25V
- Stand alone unit
- Fast rise and drop time: <3µsec
- 5 digit digital thumbwheel switches



HC-110