Comprehensive Features
With superior fidelity and wide dynamic range, the 2711A has outstanding performance, offering 16-bit vertical resolution with over 64 k of horizontal memory. Standard or arbitrary waveforms are created through the front panel or waveform creation software. The adjustable sample clock ranges from 0.1 S/s to 2 MS/s. Superior fidelity, low cost, and wide dynamic range make the 2711A ideal for applications involving high precision, low voltage or signal amplification. These include power line harmonics, audio signals, automotive air bags, medical devices and a host of other applications.

Comprehensive Features

Function Generator Operation
Direct front panel access to 10 standard waveforms with adjustable parameters provides function generator operation for basic lab use. For test applications where custom signals are required, up to 100 unique waveforms may be stored in waveform memory and recalled via the 2711A's front panel or the included WaveWorks™ Jr. wave creation software.

Effective User Tools
Expand the 2711A's memory capabilities by adding an optional sequence generator. Each sequence program can have up to 100 steps, which can link to any of the 2711A's 100 user-defined waveforms. Each waveform may be looped over one million times per step. Ten unique sequence programs may be stored in the sequencer's non-volatile memory.

Warranty
The Model 2711A is backed by a full 3-year warranty and TEGAM's 30-day no risk trial.
Specifications

Output Waveforms
Up to 100 High-definition custom waveforms, Sine, Square, Triangle, Ramp, DC, Exponential, Haversine, Pulse, Gaussian, Sin x/x (Sinc).

Waveform
Storage: 100 Waveforms
Resolution: Horizontal Points: 65,500 max
            Vertical Points: 16 bits, 65,536 (+32,767 to -32,768)
Sample Rate: 0.1 Hz to 2 MHz (10 s to 500 ns)
            4-digit resolution
            ±50 ppm accuracy
Transition Time: < 150 ns
(Tested with square wave, filter off, 10 Vp-p, 50 Ω termination.)
Spectral Purity: (THD + Noise): -86 dB typical
(Tested with 80 kHz measurement bandwidth, 2 MHz clock, 2 kHz sine wave, 1000 points, filter on, full amplitude, 50 Ω termination.)

Amplitude and Offset
Range Resolution Accuracy
±1.00 to 10 V 10 mV 1 % of setting + 20 mV
±100 mV to 999 mV 1 mV 3 % of setting + 5 mV
±10 mV to 99.9 mV 100 µV 5 % of setting + 1 mV
Note: 50 Ω source impedance, measured at open circuit tested with 1 kHz sinewave plus DC offset.

Analog Filter
User-selectable 700 kHz 7th order, 40 kHz 3rd order

Sequence Generator (Optional)
Waveform: Transient-free Loop-and-Link
Repetitions: Loop: 1,048,575 times
            Link: 100 waveforms
Program: 100 Steps total
File: 10 Sequences

Operational Modes
Continuous: Output runs continuously between selected memory address locations.
Triggered: Output at start point until triggered, then runs once.
Gated: As triggered except output is continuous until gate signal ends.
Burst: Each trigger outputs a preprogrammed number of waveforms from 1 to 1,048,575.
Toggled: Alternate triggers gate the output waveform.
Master-Slave: For multi-unit operation.
Cont-Sync: Multiple units run continuously in sync with the master unit.
Trig-Sync: Multiple units run in sync with the master unit for one cycle when the master unit is triggered.
Trig-Seq: A tail-chasing mode between the master and the slave unit initiated by triggering the master unit.

Outputs
Main Output: Front-panel/50 Ω impedance.
Sync Output: Front-panel TTL sync output, 50 Ω impedance.
Clock Out: Rear panel AWG waveform sample clock output (TTL). X2 sample clock.
Reference Out: Rear panel internal 10 MHz reference output (TTL).
Sync Trigger Out: Rear-panel BNC (TTL) for multiple unit operation.

Inputs
TRIG IN: Rear-panel TTL trigger input for triggered, gated, toggled, burst, and master slave modes.
CLOCK IN: Rear-panel sample clock input (TTL, ≤ 4 MHz).
REF IN: Rear-panel 10 MHz reference input. The internal crystal-controlled oscillator will phase-lock to the input.

Trigger Sources
Manual Trigger: Front-panel button
Ext. Trigger Input: Rear-panel BNC connector

Creation Tools
WaveWorks™Jr. for Windows™
PC Requirements: 486DX or better with 4 MB RAM.
Interfaces: COM port or National Instruments AT-GPIB card or equivalent.
Standard Functions: 21 Math Operation: 6 Operators, 12 Transfer Functions
Sequence Creation: Optional hardware required
Waveform Analysis:
Frequency Domain: FFT and IFFT; up to 500th harmonic, graphic display, and tabulation.
Time Domain: Waveform and digital pattern.
Edit: Point, Vertex, and Harmonics (FFT and IFFT).

Computer Interface
RS-232C: 19.2 kBaud, max.
GPIB: IEEE Std. 488.2-1987

General
Temperature Range: 23 ºC +/-3 ºC (73.4 ºF +/-5.4 ºF) for specified accuracy
Operates: 0 ºC to +50 ºC (+32 ºF to +122 ºF)
Storage: -20 ºC to +60 ºC (+4 ºF to +140 ºF)
Dimensions: 25.8 X 11.5 X 30 cm W x H x D
            (10.14 in X 4.53 in X 11.81 in)
Weight: 5.0 kg (11 lb)
Power: 55 VA; 45W (max)
        100/120/220/240 VAC,
        +5 %, -10 %; 46 to 63 Hz.