# BALLAST ANALYZERS 2574R



XITRON's 2574R Ballast Analyzers feature the speed and versatility to completely change the way ballasts and tubes are tested.



### Industries Served

Automated Production Testing

Ballast Testing
Consumer Products

**Engineering Labs** 

Instrument Maintenance & Repair Light Output Verification

Peak Power & Consumption

Product Compliance Testing Test Labs

Measurements

The 2574R ballast analyzers have been adopted by ballast/lighting manufacturers worldwide because of their greatly enhanced technological capabilities, greatly reduced setup and maintenance requirements, and low cost of ownership.

With the 2574R, up to four tubes and four ballasts can be tested in a fraction of a second for every key parameter, including peak inrush, striking and light efficiency (when used with a light monitor). With a capacity of 2,000 measurements per second on each of up to 30 signals, the only limitation to testing throughput is the speed of your production line.

The 2574R can be used in stand alone or computer controlled environments. It allows the user to simultaneously measure all pins on all tubes, independent output measurements, 12 voltages and 12 currents, (i.e. independent tube V and I measurement, independent filament V and I, for each tube that is configured). Continuous sampling at up to 2 Msps ensures that even the shortest transient events are measured.

- Displays all relevant ballast input/output measurements on a single screen
- Completely tests a ballast in less than 100 ms
- Fully automatic ballast start-up and tube striking detection
- Results displayed graphically or numerically with down to 1 ms time resolution
- IEEE488 control of AC sources for single user interface
- Wide bandwidth, ballast output frequencies to 2 MHz
- Every signal is monitored continuously with 12-bit, 2 MHz sampling
- Print comprehensive test reports in semi-automatic test environment from built-in printer interface, or record in engineering environment
- Automatic test sequencing and complete comparison of measurements vs. limits, including selection of different 1500 series load modules and engagement of 1500 series line switch modules. No computer or user software required
- Graphical startup profiling with time sequencing
- Graphical historical measurements
- Supports magnetic, instant/rapid start, HID < 5kV pk, compact, high frequency, and hybrid ballasts, plus LED inverters
- Test Summary Screen designated for the production floor environment, can display either a large PASS/FAIL or, upon query, can show up to 3 pass/fail faults

#### SINGLE-PHASE GENERAL PURPOSE POWER ANALYZER

# **2574R**



## 2574R Options

OPTION	DESCRIPTION
Standard 257xR	Line: 5Apk, 3Arms Tube: 1.5Apk, 3kVpk
257xRHID	Line: 5Apk, 3Arms Tube: 3Apk (two pin loads only, both pins combined), 4.5kVpk (spark gaps removed)
НС	3Apk, 2Arms per pin. (HID becomes 6Apk combined)
HI	4.5kVpk (removes spark gaps)
XC	6Apk per pin
LC	0.75Apk per pin
HL	Increases line current to 40Apk
M	1.5kVpk limit, better accuracy
F	Decrease to 2MHz –3dB bandwidth, reduced accuracy above 100kHz

### CONDENSED SPECIFICATIONS

(Contact XITRON for complete specifications)

Line Input:

Volts/Current: 0.1% Power: 0.15%

**Ballast Output:** 

Volts/Current: 0.1% (Line); 0.3% (50kHz); 5% (1MHz) Power: 0.15% (line); 0.5% (50kHz); 10% (1MHz)

**Harmonics:** 

Line and Ballast Output Harmonics

Sampling:

Up to 2 MSPS continuous sampling

**Graphical Results:** 

Harmonics Barcharts, Historical Data Logging (2 sec. to 10 days, 0.5% time resolution)

**Physical Specifications:** 

Power Input: 80-265 VRMS autoselect, 50/60/400 Hz @100 VA max

Size: (HxWxD) 4-1/2" x 11-1/2" x 10-1/2"

Weight: 2574R: 16 lbs. (7.3 kg)

Operating Range: 0°C to 45°C, <85% RH @ 40°C non-condensing Storage Range: -30°C to 65°C, <95% RH @ 40°C non-condensing

Digital Interfaces (standard):

IEEE488.1: Full talk/listen and controller capabilities

Parallel: IEEE1284, unformatted text or PCL

### QUALITY AND RELIABILITY

XITRON Technologies, founded in 1990, is the premier source of precision power testing and measurement instruments for industrial manufacturing and medical electronics. Using the latest digital signal processing and circuitry, XITRON's sophisticated technology gives our customers the edge in design verification and product manufacturability. XITRON is ISO 9001:2000, EN46001 registered, and FDA (GMP 820) compliant.



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