SCIONIX

48B38/SIP-CS-E3-X

CsI(Tl) SiPM detector with temperature-compensated bias and preamplifier

Scintillation detector with a 48 x 38 mm CsI(Tl) crystal read out by a 12 x 12 mm SiPM. The bias generator and preamplifier are built in and correct the SiPM gain drift. The detector runs on 5.2–16 V and gives less than 8% FWHM at 662 keV.



Scintillator	Power supply	Energy resolution at 662 keV
CsI(Tl), 48 x 38 mm [1]	**.2–16 V (25 mW)** [1]	**< 8% FWHM** [1]

Specifications

DETECTOR

Scintillator	CsI(Tl), 48 x 38 mm	[1]
Light sensor	SiPM, 12 x 12 mm	[1]

PERFORMANCE

Energy resolution at 662 keV	< 8% FWHM	[1]
Noise level	< 10 keV	[1]

ELECTRONICS & SIGNAL

Test bias voltage	26.9 V	[1]
Output impedance	50 Ω	[1]
Maximum output voltage	−1 V	[1]
Gain	−300 mV/MeV (can be adjusted on request)	[1]

CONNECTIVITY & INTERFACE

Electrical connection	LEMO ERA.0S.302.CLL: pin 1 power supply (5.2–16 V), pin 2 signal	[1]

POWER & BATTERY

Power supply	5.2–16 V (25 mW)	[1]

ENVIRONMENT & RATINGS

Temperature compensation	Built-in SiPM gain drift correction	[1]

GENERAL

Rise time	700 ns (0–100%)	[1]
Fall time	1.4 µs	[1]

Sources

[1] 48B38/SIP-Cs-E3-X – data sheet
Scionix · datasheet · p. 1; p. 2 · checked 2026-11-26
https://scionix.nl/wp-content/uploads/2017/01/48B38_SIP-CS-E3-X.pdf

Every value is taken from the manufacturer's own document; the number after the value refers to the source list. Always check against the latest datasheet before ordering.

The data comes from the manufacturer's published documents. Manufacturers may change specifications; the current configuration and performance are confirmed in the quotation.