

## 25B51/SIP-E3-CLLBC-X

**Description:** CLLBC / SiPm gamma / neutron scintillation detector with built-in temperature compensated bias generator and preamplifier.

<b>Scintillation material</b>	:	CLLBC 25.4 x 51 mm.
<b>Drawing number</b>	:	VS-1771-40
<b>Crystal read out</b>	:	series of 12 x12 mm <sup>2</sup> SiPm.
<b>Light guide</b>	:	Quartz
<b>Power supply (bias)</b>	:	5.2 – 16 V (25 mW).
<b>Test bias voltage</b>	:	26-28 V (internally generated)
<b>Electrical connections</b>	:	Signal        RG 174 (50 cm) flying leads Bias         RG174 (50 cm) flying leads
<b>Maximum voltage output</b>	:	-1.4 V (into 1 MOhm)

### Performance

<b>Output impedance</b>	:	50 Ω.
<b>Pulse rise time</b>	:	500 ns.
<b>Pulse fall time</b>	:	2000 ns
<b>Gain</b>	:	- 300 mV/MeV (1 MΩ).
<b>Energy resolution</b>	:	< 4.5 % FWHM @ 662 keV.
<b>Neutron peak location</b>	:	3.1 – 3.3 MeV
<b>Noise level</b>	:	< 15 keV (20 °C).

