

SCIONIX HOLLAND BV

Dedicated Scintillation Detectors

Regulierenring 5

3981 LA Bunnik

The Netherlands

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Dedicated
Scintillation detectors

Page 1

Ship to:

Università degli studi di Milano Bicocca
Attn. Ms. M. Cogliati
Dipartimento di Fisica "G. Occhialini"
Piazza della Scienza 3
Edificio U2
20126 Milano (MI)
Italy

Bill to:

Università degli studi di Milano Bicocca
Attn. Mr. M. Nastasi
Dipartimento di Fisica "G. Occhialini"
Piazza della Scienza 3

20126 Milano (MI)
Italy

Packing list

Shipping date : 29-02-2024

Delivery no. :	410687	Your ref. 2 :	CIG:Z193DB978C
Our order no. :	210126	Delivery terms :	Delivered At Place
Your order no./ref. :	n° 419 /Project 2020-Cont-0359	E-mail :	ordini-dfo@unimib.it

No.	Qty.	Unit	Itemcode Description	Nett weight each (kg)	Total nett weight (kg)
1	1,00	pc(s)	51B51/2M Tariff code number 9030900000 Country of origin EU, The Netherlands Scintillation detector consisting of a Ø51 mm, 51 mm high NaI(Tl) scintillation crystal mounted in an aluminium housing, optically coupled to a Ø51 mm PMT, surrounded by a solid mu-metal shield, ending in a 14 pins blue base. Fully finished according to drawing VS-0008-55.	0,7200	0,7200
Serial nos.: S1AB3894					
2	1,00	pc(s)	VD14-E2 Tariff code number 9030900000 Country of origin EU, The Netherlands Plug on voltage divider, equipped with a preamplifier. Including a power cable from LEMO FFA 0S 302CLAC37 to 9 pins Sub-D. Fully finished according to drawing: ES-2003.	0,1800	0,1800

SVF820

Signature

Packing list electronically approved

Remarks:

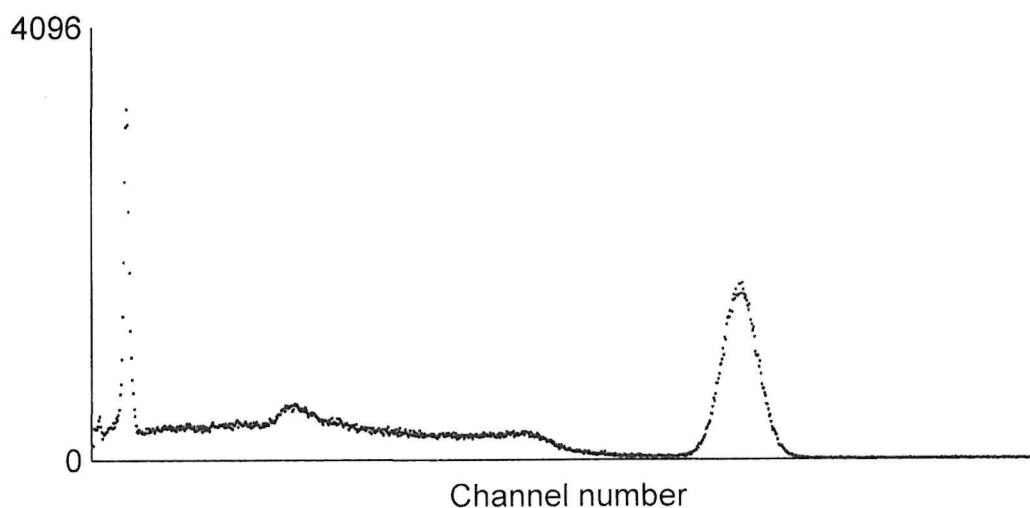
Bank: ABN AMRO Bank N.V.
EURO account no.: 24.74.20.468
VAT no.: NL 80 15 95 824 B01

BIC: ABNANL2A
IBAN: NL07ABNA0247420468
Chamber of Commerce: Utrecht, Reg. No. 30109468

All our offers for the sale and delivery of products are subject to our General Conditions of Delivery and Sale.
These General Conditions have been filed on September 16th 2013 with the Chamber of Commerce Midden-Nederland
under number 30109468. Upon request you will be provided with a copy of these conditions free of charge.

TEST SHEET

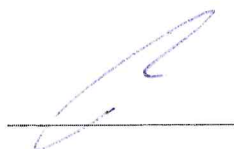
Detector type : 51B51/2M
Crystal : NaI(Tl)
Read-out : ETL 2" Type 9266
Serial number : S1AB3894



TEST RESULTS

Nuclide : Cs-137 (662 keV)
Energy resolution : 6.3 %
Noise : N/A
Peak to valley : N/A
GEE : N/A
High voltage : +610V
Date : 26 February 2024
Remarks : N/A
Tested by : Luuk Timmerman

Signature :

A handwritten signature in blue ink, consisting of a stylized 'L' followed by a horizontal line.



DATA SHEET

51B51/2M

Description : NaI(Tl) scintillation detector with standard 14 pins connector

Scintillation crystal	:	NaI(Tl), Ø51x51 mm.
Drawing	:	VS-0008-55.
Housing	:	0.5 mm aluminium.
Magnetic shielding	:	Solid 0.63 mm around PMT.
Photomultiplier tube	:	Ø51 mm, ETL 9266
Dimensions:		
Length	:	185 mm.
Diameter	:	58.8 mm.
Connections	:	14-pins JEDEC connector.
Temperature range	:	-20 °C to +65 °C.

Performance

Energy resolution	:	< 7.5% FWHM @ 662 keV
Gain stability	:	< 1% over 24 hours at 20 °C
Typical high voltage	:	500 to 900 V



Last revision: 01-08-2023
Revision number: 1
Document name: 51B51_2M

Scionix Holland B.V.

**Regulierenring 5
3981 LA Bunnik
The Netherlands**

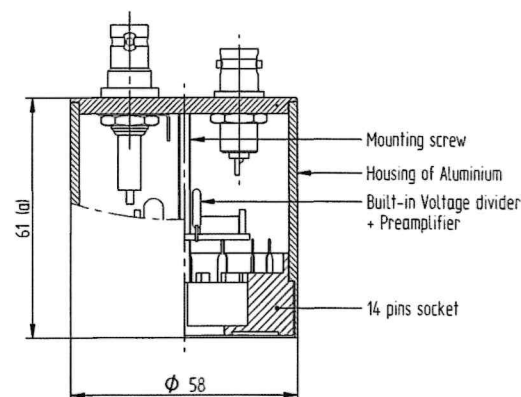
**Tel: + 31 30 657 03 12
Fax: +31 30 656 75 63
Website: www.scionix.nl
E-mail: sales@scionix.nl**

2" Plug-on Voltage Divider model VD14 – E2

Model Number : VD14 - E2.

Description : Plug-on Voltage Divider with preamplifier included suited for use with 51, 76 mm 130 mm photomultiplier tubes.

Dimensions : 58 mm diameter, 61 mm high, Aluminum housing.



Connectors :

High Voltage	:	SHV
Signal	:	BNC
Preamp. power (Standard)	:	Dual lemo type ERA0S302CLL
		Pin 1 = + 12 V (female)
		Pin 2 = - 12 V (male)

Power cable from LEMO FFA 0S 302CLAC37 to 9 pins Sub-D. Pin layout :

Pin 1 = Ground (braid)
Pin 4 = +12 V (brown)
Pin 9 = -12 V (white)

Power requirements : +12 V, 16 mA; -12 V, 16 mA; total 300 mW. Max. ± 18 V.

Resistor chain : 5.6 M Ω total

Photomultiplier Tube : 3" ETL 9305, 2" ETL 9266, 5" ETL 9390, Hamamatsu R1307, R6231, R6233, ADIT B51, B76 series or equivalent.

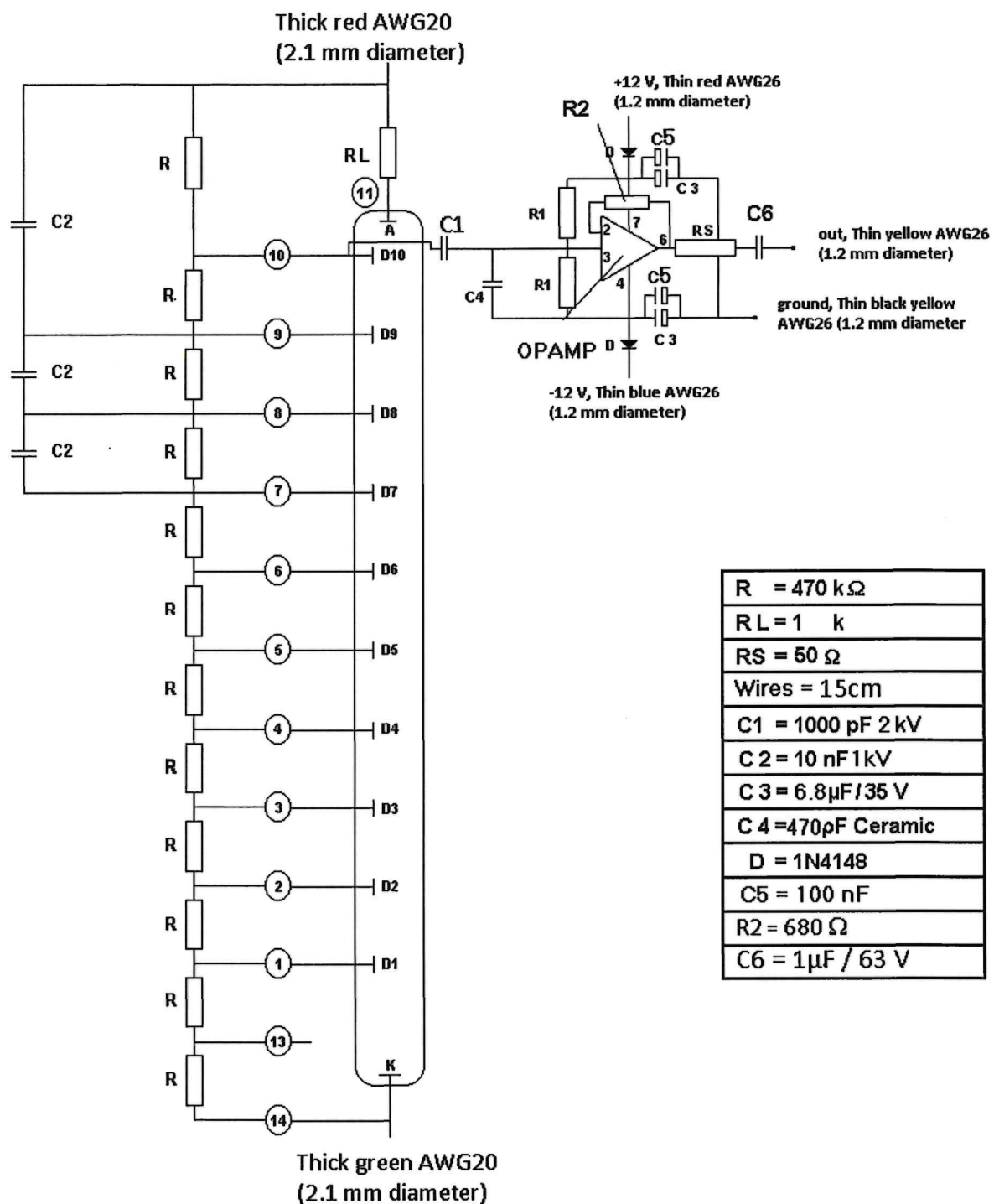
Output impedance : 50 Ω .

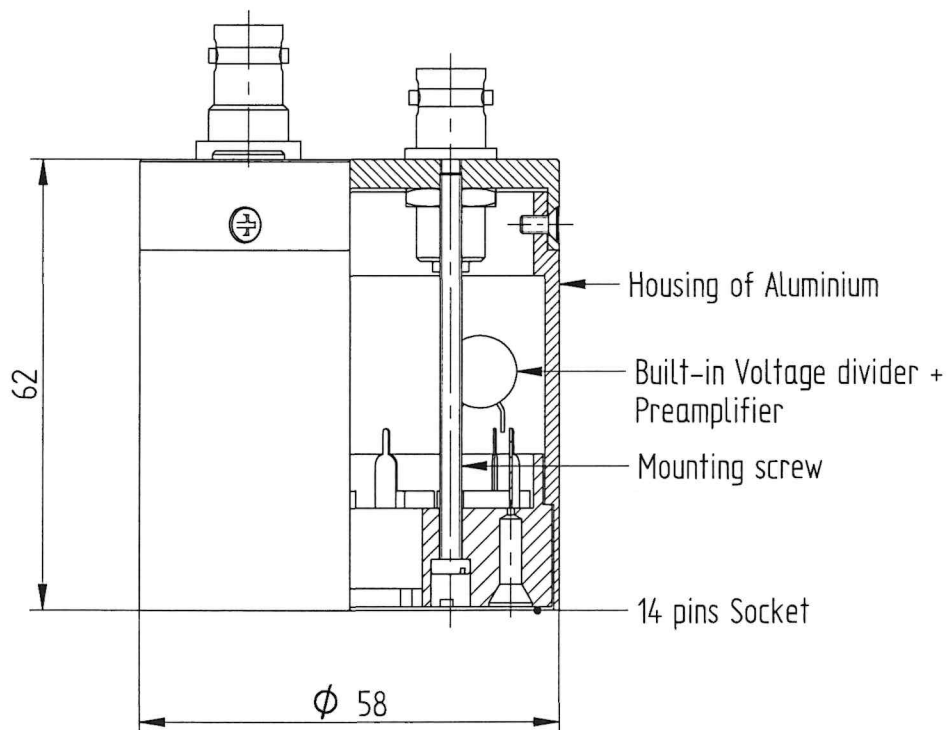
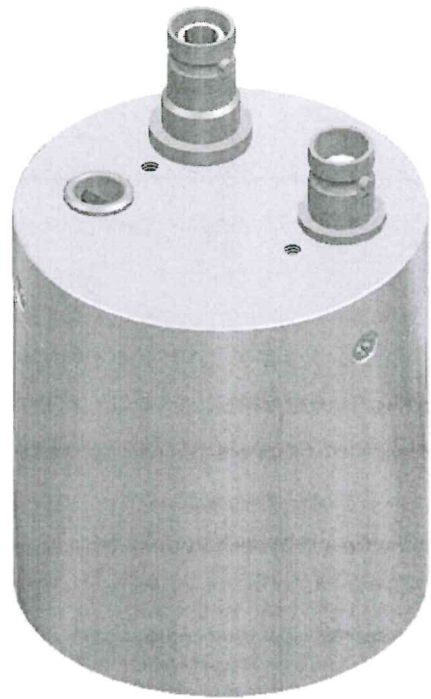
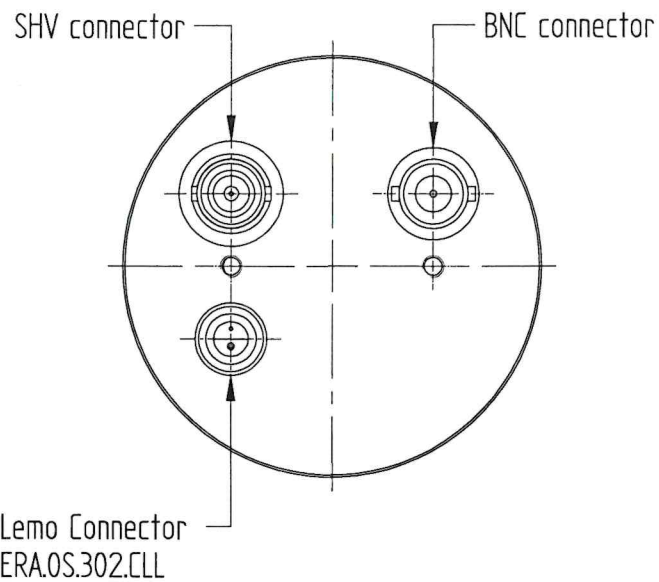
Output pulse polarity : Positive

Pulse fall time : Approx. 50 μ s

Maximum signal height : 0 - ± 10 V

Temperature range : -20 to +65 $^{\circ}$ C.





CHECKED: C.V.		DIMENSIONS: MM	RIVISIE	DEFINITION
SCALE: 1 : 1	DRAWN: 14-02-2018		R4	
 SCIONIX SCIONIX HOLLAND BV Radiation Detectors & Crystals			R3	
			R2	
			R1	
			TYPE:	VD14-E2
TITLE: ASSEMBLY	DWG. No. ES-2003		A 4	

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