Subject: Re: Fwd: Replacement for HTIA EC T150

From: Giacomo Ciani <ciani@phys.ufl.edu>

Date: 5/14/2012 3:47 PM

To: "Barbet, Mark C" < mbarbet@ufl.edu>

CC: Eric Deleeuw <edeleeuw@ufl.edu>, Guido Mueller <mueller@phys.ufl.edu>, Mindy Jacobson

<mjacobso@ligo.caltech.edu>

Hi all,

I've tried to catch up with the exchange of e-mail in between talks. The best sensor to replace the one we have is the last one Mindy found. However, let me point out that integrating a different sensor in the setup implies mechanical, software and maybe electrical adaptations that are likely to require at least couple of weeks, to then obtain a results that is a bit harder to compare with the previous ones. So, the advantage of this solution is not immediatly clear to me. It depends on how much Heimann can expedite the shipping... if we can get the HTIA in 3 weeks, I'll rather wait... and order 2!

Giacomo

```
Giacomo Ciani

LIGO Scientific Collaboration
Univ.of Florida|Dep.of Physics

PO Box 118440
Gainesville, FL32611-8440
```

Phone +1 352 392 3267 Fax +1 352 392 3591 ciani@phys.ufl.edu

On Mon, 14 May 2012 10:37:37, Barbet, Mark C wrote:

Ηi,

This sensor has an extra two pins, which if I read correctly, are for calibration purposes only?

If I understand these devices correctly (I may not) they are made so that their voltage changes based on the temperature they are reading. So, since the device is made for a different temperature range, will the voltage difference on this new device correspond to different temperatures than the same voltage on the old detector? Would this even be a real problem for us, since what we're testing for is uniformity?

Also, will the lack of internal compensation for ambient temp be much of an issue here?

Do any of these in stock on a pcb (not necessary I think, just easier to install since our current device is on a pcb)?

If it works for our purposes, I see no reason not to try it.

Thanks,

Mark

On Mon, 14 May 2012 13:02:46 -0700, Mindy Jacobson wrote:

Great news!

1 of 3 3/24/2014 2:39 PM

```
Looks like the distributor, Boston Electronics, has a sensor that can
do the job for us.
Can you also please review this material to confirm?
I think we should get one of these <u>in addition to</u> waiting for a
proper replacement item from Germany.
What do you all think?
Thanks,
Mindy
----- Original Message ------
Subject:
             Replacement for HTIA EC T150
         Mon, 14 May 2012 15:42:08 -0400
Date:
From:
         Jim Melnyk
To:
       Mindy Jacobson
cc:
       Bluefish@Boselec.com
Good Afternoon Mindy,
Attached is a spec sheet for another Heimann thermopile with an
integrated amplifier.
We have several of these in stock. The unit price is $109.
Like the detector you already have, this HIS includes a Fresnel lens
but this has a narrower field of view, 10 degrees versus the 20
degrees of the HTIA.
Unlike your detector, the HIS does not include compensation for
ambient temperature. The HIS units I have in stock are calibrated for
a maximum target temperature of 100C rather than the 150C of your
HTIA unit.
We cannot ship today but can do so tomorrow if we receive an order
early enough.
Please let me know how you want to proceed.
Regards,
Jim Melnyk
Applications Engineer
Boston Electronics Corporation
91 Boylston Street, Brookline, MA 02445, USA
Tel: 800-347-5445 or 617-566-3821
Fax: 617-731-0935
E-mail: JMM@Boselec.com
URL: www.Boselec.com <http://www.boselec.com/>
*****************
Resources:
* Quantum Cascade Lasers
<http://www.boselec.com/products/documents/AlpesQCLlit12-28-09.pdf> -
IR Sources (thermal)
<http://www.boselec.com/products/documents/IRSources-WWW11-12-10_000.pdf>
- Choppers, Lock-ins
<http://www.boselec.com/products/documents/OpticalChoppersLock-InsWWW1-10-11.pdf>
<http://www.boselec.com/products/documents/OpticalChoppersLock-InsWWW1-10-11.pdf>
IR detectors (fast, cooled)
```

2 of 3 3/24/2014 2:39 PM

```
<http://www.boselec.com/products/documents/VigoCatalog4-19-11-www.pdf> -
IR Detectors (room temp Pyros
<http://www.boselec.com/products/documents/HeimannPyros5-27-10 000.pdf>,
Thermopiles
<a href="http://www.boselec.com/products/documents/HeimannThermopiles6-7-11.pdf">http://www.boselec.com/products/documents/HeimannThermopiles6-7-11.pdf</a>)
- IR detectors (imaging arrays)
<http://www.boselec.com/products/documents/HeimannArrays5-19-11.pdf>
<http://www.boselec.com/products/documents/HeimannArrays5-19-11.pdf>
UV Detectors
<http://www.boselec.com/products/documents/UVPhotodetectors7-6-11-www.pdf>
- Photon Counting Detectors
<a href="http://www.boselec.com/products/documents/BH-PhotonCountingDetectorsBROCHURE2-7-11.pdf">http://www.boselec.com/products/documents/BH-PhotonCountingDetectorsBROCHURE2-7-11.pdf</a>
- Photon Counting ELECTRONICS (TCSPC)
<http://www.boselec.com/products/documents/BH-TCSPCSystemsBROCHURE12.28.09.pdf>
<http://www.boselec.com/products/documents/BH-TCSPCSystemsBROCHURE12.28.09.pdf>
Fluorescence Lifetime Microscopy Imaging (FLIM)
<a href="http://www.boselec.com/products/documents/BH-TCSPCforMicroscopyBROCHURE12.28.09.pdf">http://www.boselec.com/products/documents/BH-TCSPCforMicroscopyBROCHURE12.28.09.pdf</a>
```

3 of 3 3/24/2014 2:39 PM