




Part #:	SAM L10/L11 Family of Arm® Cortex®-M23 MCUs	 
Description:	The SAM L10/L11 family is the industry's first Arm Cortex-M23 MCUs with chip-level robust security features, including Arm TrustZone®.	 Download Datasheet

EEVblog Electronics Community Forum

A Free & Open Forum For Electronics Enthusiasts & Professionals


Hello volvo_nut_v70

Show unread posts since last visit.
Show new replies to your posts.
October 22, 2019, 03:32:27 pm


This topic ▾ Search

- Home
- Help
- Search
- Profile
- About us
- My Messages
- Calendar
- Links
- HashTags
- Members
- Logout

EEVblog Electronics Community Forum » Products » Test Equipment » Which DC Electronic Load To Get?




Used MSOX3104T Scope \$6,848 ~~\$20,142~~ [SHOP NOW >>](#)



5 PCBs for \$2, any color

\$5 off for the first 50 to order with the code "EEJLPCB"



« previous next »

Pages: 1 2 [All] [Go Down](#)


[REPLY](#) [NOTIFY](#) [MARK UNREAD](#) [SEND THIS TOPIC](#) [PRINT](#) [SEARCH](#)

Author

Topic: Which DC Electronic Load To Get? (Read 17562 times)

volvo_nut_v70 and 0 Guests are viewing this topic.

ben_r_
Frequent Contributor



Posts: 411
Country:

A Real Nowhere Man

Which DC Electronic Load To Get?
« on: August 21, 2013, 01:35:46 am » [Say Thanks](#) [Reply](#) [Quote](#)

Thinking about picking up a DC electronic load and thought Id ask here before making the purchase. I havent seen many on the market other than super expensive ones. I was kinda looking at the BK Precision 8540 [LINK](#) mostly because I have heard good things about the brand, the price was reasonable (can be had for less than \$450), and I like the skinny stand up form factor. Dont really think I need anything more than 150W, but I guess if the features/build/price is right I might jump up to a 300W unit. Anything else out there I should be considering?

[Report to moderator](#)

If at first you don't succeed, redefine success!

c4757p
Super Contributor



Posts: 7805
Country:

adieu

Re: Which DC Electronic Load To Get?
« Reply #1 on: August 21, 2013, 01:37:25 am » [Say Thanks](#) [Reply](#) [Quote](#)

What do you need it for? Actual power design work, or hobby stuff? Most commercial loads are quite expensive... any chance you could build your own?

[Report to moderator](#)

No longer active here - try the IRC channel if you just can't be without me 😊

wraper
Supporter

Re: Which DC Electronic Load To Get?
« Reply #2 on: August 21, 2013, 02:04:59 am » [Say Thanks](#) [Reply](#) [Quote](#)



Posts: 10213
Country:

gbyleveldt

Contributor

Posts: 21
Country:

ben_r_

Frequent Contributor



Posts: 411
Country:

A Real Nowhere Man

ben_r_

Frequent Contributor



Posts: 411
Country:

A Real Nowhere Man

ben_r_

Frequent Contributor



Posts: 411
Country:

A Real Nowhere Man

ben_r_

Frequent Contributor



Posts: 411
Country:

A Real Nowhere Man

Take a look at Maynuo and Itech which is BK Precision subsidiary. Both are excellent quality. They are almost the same, even PCB as similar BK models but price is significantly lower.

« Last Edit: August 21, 2013, 02:09:48 am by wraper »

Report to moderator Logged

Re: Which DC Electronic Load To Get?
« Reply #3 on: August 21, 2013, 04:03:03 am »

Say Thanks Reply Quote

+1 on the Maynuo - I have the M9711 and it's remarkable value.

Report to moderator Logged

Resistance is not futile; it is voltage divided by current ($R=V/I$)

Re: Which DC Electronic Load To Get?
« Reply #4 on: August 21, 2013, 04:27:33 am »

Say Thanks Reply Quote

Quote from: c4757p on August 21, 2013, 01:37:25 am

What do you need it for? Actual power design work, or hobby stuff? Most commercial loads are quite expensive... any chance you could build your own?

Mostly just playing around. But I have the money to buy a decent tool and really not interested in building my own unless the DIY route can produce a significantly better unit for less money and can look like a refined end product. 😊

Report to moderator Logged

If at first you don't succeed, redefine success!

Re: Which DC Electronic Load To Get?
« Reply #5 on: August 21, 2013, 04:28:01 am »

Say Thanks Reply Quote

Quote from: gbyleveldt on August 21, 2013, 04:03:03 am

+1 on the Maynuo - I have the M9711 and it's remarkable value.

Okay, Ill check out the Maynuo.

Report to moderator Logged

If at first you don't succeed, redefine success!

Re: Which DC Electronic Load To Get?
« Reply #6 on: August 21, 2013, 04:37:59 am »

Say Thanks Reply Quote

Huh, found the Maynuo M9811 for about the same price as the BK Precision 8540 but its a 0-150V, 0-30A 200W unit as opposed to the BK 8540 which is only a 0-60V, 1ma-30A, 150W unit. Seems to be a better unit for the money, if its a well made product. Never heard of them, Ive at least heard of BK Precision.

Report to moderator Logged

If at first you don't succeed, redefine success!

Re: Which DC Electronic Load To Get?
« Reply #7 on: August 21, 2013, 04:41:27 am »

Say Thanks Reply Quote

Looks like there is also the Atten ATZ3710A 150W. Its a bit cheaper than the other two. How are the Atten products?

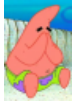
Report to moderator Logged

If at first you don't succeed, redefine success!



crt

Regular Contributor



Posts: 54

Country:

LLLLLLL-RGDSLLL-DSARLLL-
LLLLLLL



Re: Which DC Electronic Load To Get?
« Reply #8 on: August 21, 2013, 05:13:01 am »

Say Thanks Reply Quote

vote Maynuo DC Load 👍😊
especially if you can get them for taobao

difference between taobao price and ebay/aliexpress was fantastic 🤩
i get my M9712 (300W) version only about \$350

p.s
this is full review form gerrysweeny 😊
<http://gerrysweeney.com/maynuo-m9711-dc-electronic-load-unboxing-teardown-and-quick-test/>

« Last Edit: August 21, 2013, 05:29:48 am by crt »

Report to moderator Logged

all_repair

Frequent Contributor



Posts: 556



Re: Which DC Electronic Load To Get?
« Reply #9 on: August 21, 2013, 06:27:02 am »

Say Thanks Reply Quote

I just got another Array 3711A 300W. First One with me for 3 years with no problem, last month when I checked, it was still best value for money. The new version has "Sense" connectors.

Report to moderator Logged

wraper

Supporter



Posts: 10213

Country:



Re: Which DC Electronic Load To Get?
« Reply #10 on: August 21, 2013, 08:06:34 am »

Say Thanks Reply Quote

Atten is pretty crappy built compared to Maynuo. There are also a bunch of rebadges of it with the same look.

Report to moderator Logged

g3org3

Newbie

Posts: 3

Country:



Re: Which DC Electronic Load To Get?
« Reply #11 on: August 21, 2013, 09:16:31 am »

Say Thanks Reply Quote

Got the REK RK8511, not as accurate as the BK or the Maynuo but does the job. Very happy with it for 250 Euros... (for Hobby staff that is..)

Report to moderator Logged

Jay_Diddy_B

Super Contributor



Posts: 1793

Country:



Re: Which DC Electronic Load To Get?
« Reply #12 on: August 21, 2013, 09:16:53 am »

Say Thanks Reply Quote

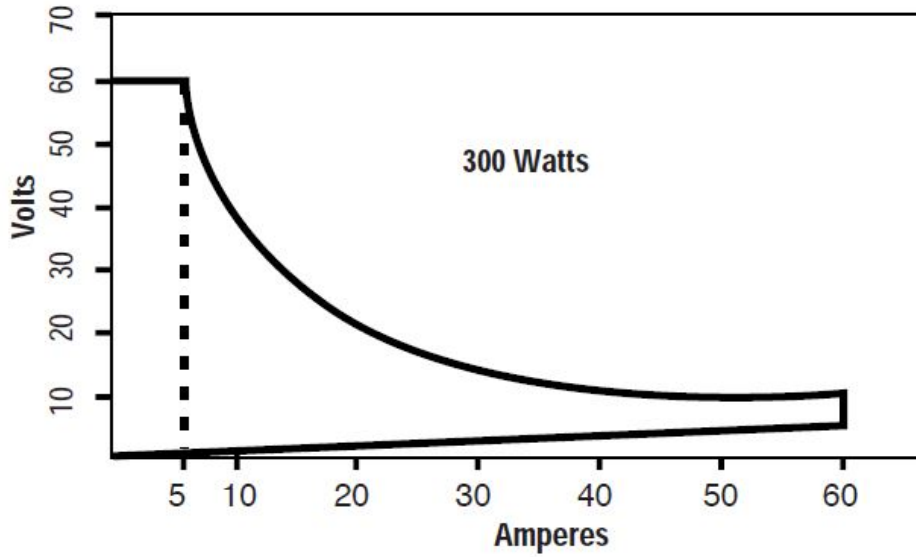
Hi,

I would check the specification carefully when selecting a 60V or 150V load.

The reason is that if you need high currents at low voltages the 60V unit might work better.

Here is the curve for an HP 60502B;

Figure A

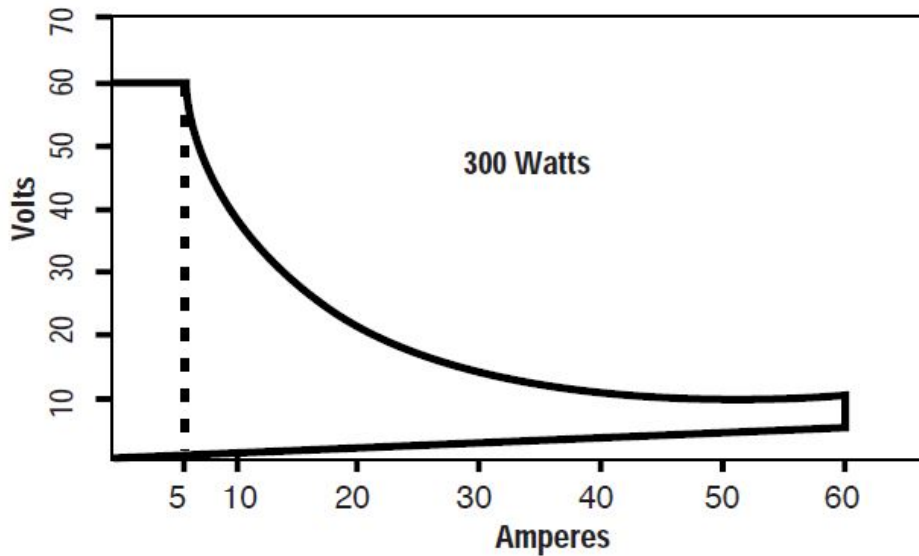


Other manufacturers should have similar curves.

This comes from the resistance of the MOSFETs and the shunt used in the load. With CPU and FPGA voltages dropping to around 1V and high current this is becoming increasingly important. If you don't think you are going to test 1V supplies it is not so important.

Jay_Diddy_B

Figure A



load map.JPG (29.44 kB, 658x443 - viewed 6102 times.)

Report to moderator Logged

DaveW
Frequent Contributor

Posts: 275
Country:

Re: Which DC Electronic Load To Get?
« Reply #13 on: August 21, 2013, 10:24:22 am »

Say Thanks Reply Quote

I've been using the B&K version for a few years (I'm sure it's the same as the Maynuo; I just needed it next day and that was what Farnell had in stock). It's pretty good, seems to meet its specs although slightly awkward to use. My unit has a slight drift over temperature, but nothing to worry about. The pulse response is quick, I regularly use it for 10ms pulses going from 0-5A, and it responds within around around 750us. The build quality seems reasonable although I haven't opened it up; bottom line, it seems to do the job although the 300W versions are more pleasant to use

saturation

Super Contributor



Posts: 4788

Country:

Doveryai, no proveryai



Re: Which DC Electronic Load To Get?

« **Reply #14 on:** August 21, 2013, 04:17:38 pm »

Say Thanks Reply Quote

The Atten looks like the the Array 3710a models which was extensively discussed on this forum; pictures and all. I'm not sure I'd rank the Maynuo build quality as better than the Array, there are tear downs you can see on the forum and judge for yourself. Did the OP check the archives?

IMHO the Array is an unusual beast; its limited in terms of what it can do as an eload but it is built like a rock, enough for Gossen Metrowatt put its brand name on it. The Maynuo is a better choice if you need the added capabilities it has, but I think the build quality will cause it to fail sooner used frequently under full load; the Array is usually found cheaper and is the ODM under many brand names.

Quote from: wraper on August 21, 2013, 08:06:34 am

Atten is pretty crappy built compared to Maynuo. There are also a bunch of rebadges of it with the same look.

Report to moderator Logged

Best Wishes,

Saturation

saturation

Super Contributor



Posts: 4788

Country:

Doveryai, no proveryai



Re: Which DC Electronic Load To Get?

« **Reply #15 on:** August 21, 2013, 04:21:06 pm »

Say Thanks Reply Quote

all_repair, do you mean your 3711a has 'sense' connector or the newer model 3720?

If you mean the 3720, yes its a newer Array model eload but cost 2-3x than the 3710a.

Quote from: all_repair on August 21, 2013, 06:27:02 am

I just got another Array 3711A 300W. First One with me for 3 years with no problem, last month when I checked, it was still best value for money. The new version has "Sense" connectors.

« *Last Edit: August 21, 2013, 09:27:15 pm by saturation* »

Report to moderator Logged

Best Wishes,

Saturation

CarlG

Regular Contributor



Posts: 153

Country:



Re: Which DC Electronic Load To Get?

« **Reply #16 on:** August 21, 2013, 05:59:18 pm »

Say Thanks Reply Quote

[TTi LD300](#) might be worth a closer look.

Report to moderator Logged

Electro Fan

Super Contributor



Posts: 1896



Re: Which DC Electronic Load To Get?

« **Reply #17 on:** August 21, 2013, 09:23:58 pm »

Say Thanks Reply Quote

Quote from: crt on August 21, 2013, 05:13:01 am

vote Maynuo DC Load
especially if you can get them for taobao

difference between taobao price and ebay/aliexpress was fantastic
i get my M9712 (300W) version only about \$350

p.s
this is full review form gerrysweeny
<http://gerrysweeny.com/maynuo-m9711-dc-electronic-load-unboxing-teardown-and-quick-test/>

Another plus 1 on Maynuo

If you can get one a M9712 for anywhere near \$350 that would be fantastic deal and value
(I don't know anything about taobao but if you don't need 300 watts and can live with 150 watts maybe you could cut the cost down further with Maynuo's 150 watt model)

Report to moderator Logged

olsenn
 Frequent Contributor

 Posts: 993

Re: Which DC Electronic Load To Get?
 « Reply #18 on: August 22, 2013, 12:09:13 am » Say Thanks Reply Quote

Look into the Itech IT8511. I have one and it works quite well. 120volts/30A/150watts. It's programmable, and it's built like a brick shithouse

Report to moderator Logged

Electro Fan
 Super Contributor

 Posts: 1896

Re: Which DC Electronic Load To Get?
 « Reply #19 on: August 22, 2013, 12:41:55 am » Say Thanks Reply Quote

Either way, regardless of brand (if it does what you want) - an electronic load might be one of the least understood / known / considered pieces of test equipment, but it definitely should be considered.

Report to moderator Logged

ben_r_
 Frequent Contributor

Re: Which DC Electronic Load To Get?
 « Reply #20 on: August 22, 2013, 12:49:24 am » Say Thanks Reply Quote

Quote from: crt on August 21, 2013, 05:13:01 am

vote Maynuo DC Load
 especially if you can get them for taobao

difference between taobao price and ebay/aliexpress was fantastic
 i get my M9712 (300W) version only about \$350

p.s
 this is full review form gerrysweeny
<http://gerrysweeney.com/maynuo-m9711-dc-electronic-load-unboxing-teardown-and-quick-test/>

Please explain this taobao to me. If I could get the M9712 for that cheap I'd jump on it. Is it a website? Seller? I've never heard of it.

Report to moderator Logged

If at first you don't succeed, redefine success!

crt
 Regular Contributor

Re: Which DC Electronic Load To Get?
 « Reply #21 on: August 22, 2013, 12:59:53 am » Say Thanks Reply Quote

Quote from: ben_r_ on August 22, 2013, 12:49:24 am

Please explain this taobao to me. If I could get the M9712 for that cheap I'd jump on it. Is it a website? Seller? I've never heard of it.

like ebay, but in china (off course with chinese language)

<http://item.taobao.com/item.htm?id=14577117671>
 I use forwarder to get it

Maybe you can ask help from franky (iloveelectronic)

p.s
 I'm have not affiliation with both of them
 and from this seller, USB connection is not included
 you have to purchase separately if you needed

Report to moderator Logged

ben_r_
 Frequent Contributor

Re: Which DC Electronic Load To Get?
 « Reply #22 on: August 22, 2013, 02:24:08 am » Say Thanks Reply Quote

Quote from: crt on August 22, 2013, 12:59:53 am

Quote from: ben_r_ on August 22, 2013, 12:49:24 am

Please explain this taobao to me. If I could get the M9712 for that cheap I'd jump on it. Is it a website? Seller? I've never heard of it.

like ebay, but in china (off course with chinese language)

<http://item.taobao.com/item.htm?id=14577117671>
 I use forwarder to get it

ben_r_
 Frequent Contributor

 Posts: 411
 Country:
 A Real Nowhere Man

Maybe you can ask help from franky (iloveelectronic)

p.s
I'm have not affiliation with both of them
and from this seller, USB connection is not included
you have to purchase separately if you needed

Wow, \$318USD?! I wants, gotta figure this out, def dont speak chinese...

Report to moderator Logged

If at first you don't succeed, redefine success!

grego
Frequent Contributor

Posts: 330
Country:

Re: Which DC Electronic Load To Get?
« **Reply #23 on:** August 22, 2013, 03:10:22 am »

Say Thanks Reply Quote

Quote from: ben_r_ on August 22, 2013, 02:24:08 am

Quote from: crt on August 22, 2013, 12:59:53 am

Quote from: ben_r_ on August 22, 2013, 12:49:24 am

Please explain this taobao to me. If I could get the M9712 for that cheap I'd jump on it. Is it a website? Seller? I've never heard of it.

like ebay, but in china (off course with chinese language)

<http://item.taobao.com/item.htm?id=14577117671>
I use forwarder to get it

Maybe you can ask help from franky (iloveelectronic)

p.s
I'm have not affiliation with both of them
and from this seller, USB connection is not included
you have to purchase separately if you needed

Wow, \$318USD?! I wants, gotta figure this out, def dont speak chinese...

Yeah same here.

Report to moderator Logged

Electro Fan
Super Contributor

Posts: 1896

Re: Which DC Electronic Load To Get?
« **Reply #24 on:** August 22, 2013, 03:28:33 am »

Say Thanks Reply Quote

I don't see where it gives the unit price but maybe you guys should check to see if they have quantity discounts, or special EEV pricing

Let us know if anyone in the U.S. figures out how to get one delivered for anywhere near \$318 !

Report to moderator Logged

steve1515
Contributor

Posts: 42
Country:

Re: Which DC Electronic Load To Get?
« **Reply #25 on:** November 18, 2013, 02:42:22 pm »

Say Thanks Reply Quote

Did anyone ever figure out how to get one in the US? I'm looking to get one as well.

Report to moderator Logged

Electro Fan
Super Contributor

Posts: 1896

Re: Which DC Electronic Load To Get?
« **Reply #26 on:** November 18, 2013, 04:41:32 pm »

Say Thanks Reply Quote

Quote from: steve1515 on November 18, 2013, 02:42:22 pm

Did anyone ever figure out how to get one in the US? I'm looking to get one as well.

On Amazon there was a seller called JUMO Trading LLC that had reasonable prices on the Maynuo 9712 with the M-133 USB interface cable but they weren't anywhere near \$318. Might be worth an email to JUMO (via Amazon) to see what they tell you. In my experience JUMO was very, very responsive, YMMV.

Also saw this:
<http://www.amazon.com/Maynuo-M9712-Programmable-Electronic-0->

[150V/dp/B00FJWLEWC/ref=sr_1_6?ie=UTF8&qid=1384792611&sr=8-6&keywords=m9712+maynuo](https://www.eevblog.com/forum/testgear/150V/dp/B00FJWLEWC/ref=sr_1_6?ie=UTF8&qid=1384792611&sr=8-6&keywords=m9712+maynuo)
- don't know anything about this seller or if their price includes the M-133

[Report to moderator](#)  Logged

cosmos
Regular Contributor



Posts: 110
Country: 

 **Re: Which DC Electronic Load To Get?**
« **Reply #27 on:** November 18, 2013, 05:01:01 pm »


[Say Thanks](#) [Reply](#) [Quote](#)

+1 for Maynou (M9712C, 150V, 60A, 300W)
I where in contact with Maynou directly to get help on how to calibrate, they seemed open to direct purchase (but maybe they thought I was a company).
But if lots of people here are interested maybe Maynou would be interested too?

[Report to moderator](#)  Logged

steve1515
Contributor

Posts: 42
Country: 

 **Re: Which DC Electronic Load To Get?**
« **Reply #28 on:** November 18, 2013, 05:24:18 pm »

[Say Thanks](#) [Reply](#) [Quote](#)

Quote from: Electro Fan on November 18, 2013, 04:41:32 pm

On Amazon there was a seller called JUMO Trading LLC that had reasonable prices on the Maynou 9712 with the M-133 USB interface cable but they weren't anywhere near \$318. Might be worth an email to JUMO (via Amazon) to see what they tell you. In my experience JUMO was very, very responsive, YMMV.

Also saw this:

http://www.amazon.com/Maynuo-M9712-Programmable-Electronic-0-150V/dp/B00FJWLEWC/ref=sr_1_6?ie=UTF8&qid=1384792611&sr=8-6&keywords=m9712+maynuo
- don't know anything about this seller or if their price includes the M-133

Thanks! I'll have to send a message to them.

Quote from: cosmos on November 18, 2013, 05:01:01 pm


+1 for Maynou (M9712C, 150V, 60A, 300W)
I where in contact with Maynou directly to get help on how to calibrate, they seemed open to direct purchase (but maybe they thought I was a company).
But if lots of people here are interested maybe Maynou would be interested too?

They don't come calibrated when you buy them?
What is the process required to calibrate one of these?
« *Last Edit: November 18, 2013, 05:30:20 pm by steve1515* »

[Report to moderator](#)  Logged

cosmos
Regular Contributor



Posts: 110
Country: 

 **Re: Which DC Electronic Load To Get?**
« **Reply #29 on:** November 18, 2013, 05:52:44 pm »

[Say Thanks](#) [Reply](#) [Quote](#)


No worries,
It came calibrated, even had papers about it.

My M8811 also came calibrated, but the 5.5 digit DVM channel was slightly off (about 20 counts if memory serves) but still inside the specification.
I wanted to have it better than that, and it was very obvious it was off since the output voltage reading (later shown to be dead on) did not match the DVM.

[Report to moderator](#)  Logged


mcinque
Supporter



Posts: 1032
Country: 

 **Re: Which DC Electronic Load To Get?**
« **Reply #30 on:** November 18, 2013, 07:36:32 pm »

[Say Thanks](#) [Reply](#) [Quote](#)

Maynou 

But be warned about aliexpress/ebay shopping from chinese market:

<https://www.eevblog.com/forum/testgear/electronic-load-difference-between-m9710-and-m9711/msg328879/#msg328879>
<https://www.eevblog.com/forum/testgear/bk-precision-peaktech-only-rebranded-objects/msg282890/#msg282890>

I know one thing: that I know nothing



Report to moderator Logged

I'm basically still a rookie and because of this, even with the best intentions, I often say bullshits

steve1515

Contributor

Posts: 42

Country:



Re: Which DC Electronic Load To Get?

« Reply #31 on: November 19, 2013, 12:19:58 am »

Say Thanks Reply Quote

It looks like I can find the M9812 on eBay for less than the M9712. Is there much difference in the two? They look identical.

Report to moderator Logged

steve1515

Contributor

Posts: 42

Country:



Re: Which DC Electronic Load To Get?

« Reply #32 on: November 19, 2013, 02:22:08 am »

Say Thanks Reply Quote

I've checked the specs on both the M9712 and the M9812 and they both look identical except that the M9812 has an LED driver test mode. I'm not really sure what that is since I can't find any documentation on it.

Report to moderator Logged

steve1515

Contributor

Posts: 42

Country:



Re: Which DC Electronic Load To Get?

« Reply #33 on: November 28, 2013, 02:22:55 am »

Say Thanks Reply Quote

So, I ended getting an M9712 from Amazon. I received it a couple of days ago, and it works nicely.



One thing though. I'm not really sure I understand the CC+CV and CR+CV modes. Can anyone explain these to me?

Report to moderator Logged

all_repair

Frequent Contributor



Posts: 556



Re: Which DC Electronic Load To Get?

« Reply #34 on: November 28, 2013, 02:59:17 am »

Say Thanks Reply Quote

If you do not yet have an exact need, likely the voltage and wattage features would be more useful than all other features. I have 2 arrays, not as pretty, but have been doing the job very well. Especiallully as loader for unknown power supply quality, I am prepared for them to be blown off. But been 5 year for 1 and still stay strong. My usage is almost daily for 1.

Report to moderator Logged

saturation

Super Contributor



Posts: 4788

Country:

Doveryai, no proveryai



Re: Which DC Electronic Load To Get?

« Reply #35 on: November 28, 2013, 03:31:42 pm »

Say Thanks Reply Quote

Yes, I second the Array 3710a , I've been running it ragged and it never gets hot even at full load, 200W. Its built like a tank and likely very durable as a unit, the software is very mediocre, at best.

Report to moderator Logged

Best Wishes,

Saturation

Share me



LINK TO CALENDAR

Jump to:

Order PCB,get components free!
Order PCBA,get PCB free!



QUOTE NOW



BUDGET MULTIMETERS !!

ANENG, UNI-T and more...

[EEVblog Main Site](#)

[EEVblog on Youtube](#)

[EEVblog on Twitter](#)

[EEVblog on Facebook](#)

SMF 2.0.15 | SMF © 2017, Simple Machines
Simple Audio Video Embedder
SMFAds for Free Forums
[XHTML](#) [RSS](#) [Mobile WAP2](#)