

Quiz – Wire Sizing

Name _____

System Specifications:

20 modules

2 strings – connected directly to the inverter

ISC of each module: 8A

USE-2 from modules to Junction Box, THWN-2 from J-Box to Inverter

Ambient temperature of conductors = 45C

Over current device terminal rating = 75C

Ambient temperature of over current device = 40C

Size the Wire from the J-Box to Inverter.

Use the following steps to size your wire – show your calculations:

1. Circuit current.
2. Over current device rating.
3. Cable sizing.
4. Cable derating.
5. Ampacity vs over current device.
6. Device terminal compatibility.
7. Device Mounting.