

HIT Double 195*

Pp = 249 WDC
 Vp = 56.1 V
 Ip = 4.45 A
 Voc = 69.5 V
 Isc = 4.85 A

System specs

Pp = 5229 WDC
 Vp = 392.7 V
 Ip = 14.6 A
 Vmax = 7*69.5*1.13 = **549.8 V**

3 strings of 7 modules


Each String
 Pp = 1743 WDC
 Ip = 4.45 A Vp = 392.7 V
 Isc = 4.85 A Voc = 486.5 V

Wire Sizing

Row box to inverter
 $Isc(\#in\ parallel)(1.25)(1.25) = 4.85(1)(1.25)(1.25) = \underline{7.6\ A}$
 Teperature corrected to 117F, => .76 factor
 Conduit fill 7-9 CCC => .70 factor
 For THWN-2, $7.6/ (.76*.7) = \underline{14.3\ A}$ **10 AWG**

*Using STC + 30% Specs

	<u>WIRE SCHEDULE</u>	<u>CONDUIT</u>
A	2 - #10AWG PV CABLE 1 - #10AWG BARE COPPER	NONE
B	6 - #10 AWG THWN-2 1 - #10 AWG THWN GND	3/4" EMT

		
TITLE: 1 LINE DIAGRAM - TEP TEST YARD		
FOR: AZRISE	DRAWN BY: BMS	REV: 0
DATE: 06/12/12	SCALE: N/A	DRAWING NUMBER: 2012101