

VOLTAGES		INTERCONNECTION:
DC MAX:	MAX DC VOLTAGE SET BY DC OPTIMIZERS 500V	120% RULE (NEC.12(D)(2)) UTILITY FEED (200A) + TOTAL PV BACKFEED (20A) = 220A
DC OP:	DC OPERATING VOLTAGE SET BY OPTIMIZERS 350V	BUSS RATING (200A) X 120% = 240A
CURRENTS		STRING:
DC MAX:	MODULE Isc x strings x 1.25 10.02 x 1 x 1.25 = 25.05A	(1) 9 MODULES & 10 P400 DC OPTIMIZERS
DC OP:	MODULE IMP x strings 9.50 x 2 = 19A	(1) 9 MODULES & 9 P320 DC OPTIMIZERS OVERCURRENT PROTECTION CALCULATION
SOURCE Idc:	MODULE Isc x 1.25 x 1.25 10.02 x 1.25 x 1.25 = 15.63A	7600W / 240V = 32A
OUTPUT Iac:	INVERTER Iac x 1.25 x INVERTER QTY 1x 1.25 x 32 = 40A	32A X 125% (CONTINUOUS DUTY) = 40A (1) 2 POLE 40A OCPD TO BE USED

- NOTES**
1. ALL CONDUIT TO USE WATER-TIGHT EXPANSION FITTINGS.
 2. ALL CONDUIT TO BE A MINIMUM OF 1" ABOVE THE ROOFTOP.
 3. PV CONNECTION INTO LOAD CENTER SHALL BE POSITIONED AT THE APPLICABLE END FROM THE UTILITY INPUT FEEDER LOCATION. (WHERE APPLICABLE)
 4. ALL EQUIPMENT TO BE RATED NEMA-3R UNLESS OTHERWISE NOTED.
 5. LOWEST EXPECTED AMBIENT TEMPERATURE BASED ON ASHRAE MIN. MEAN EXTREME DRY BULB TEMPERATURE FOR ASHRAE LOCATION MOST SIMILAR TO INSTALLATION.
 6. HIGHEST CONTINUOUS AMBIENT TEMPERATURE BASED ON ASHRAE HIGHEST MONTH 2% DRY BULB TEMPERATURE FOR ASHRAE LOCATION MOST SIMILAR TO INSTALLATION.
 7. ALL CONDUCTORS TO BE COPPER UNLESS NOTED OTHERWISE.
 8. CONDUCTOR SIZING SHALL LIMIT VOLTAGE DROP TO 2% DC & 1.5% AC (2% TOTAL FOR MIRCO INVERTER SYSTEMS).

