

VOLTAGES		INTERCONNECTION:
DC MAX:	MAX DC VOLTAGE SET BY DC OPTIMIZERS 500V	120% RULE (NEC.12(D)(2)) UTILITY FEED (200A) + TOTAL PV BACKFEED (40A) = 240A
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 2 x 1.25 = 25.05A	(1) 11 MODULES & 11 P320 DC OPTIMIZERS
DC OP:	MODULE IMP x strings 9.50 x 2 = 19A	OVERCURRENT PROTECTION CALCULATION 7600W / 240V = 32A
SOURCE Idc:	MODULE Isc x 1.25 x 1.25 10.02 x 1.25 x 1.25 = 15.63A	32A X 125% (CONTINUOUS DUTY) = 40A
OUTPUT Iac:	INVERTER Iac x 1.25 x INVERTER QTY 1x 1.25 x 32 = 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 OPPOSITE 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).

