



Residential Solar PV Inspection Report

General Information	
Homeowner Name	Brandon Wait
Address (street, city, state, zip)	7635 E Ann Way Scottsdale, AZ 85260
Realtor Agent Name / Email	N/A
PV Installer	N/A
Finance Type	N/A
System Type	Grid Tied
Inspection Date / Time	December 16, 2019 at 11am
Inspector	Mike Craig
License	323541
Homeowner Questionnaire	
Utility	APS Arizona Public Service
Rate Plan	NA
Main Service Panel (Type / Size) Solar Back Feed Breaker Size	200amp Main Service / 2 pole 35amp breaker Solar Back-feed breaker
Module Type	SHARP Solar Module NU-U235F3 / 235 watt modules See attached for Spec / Data Sheet
Inverter Type	Enphase M190-72-240-S12 Microinverters See attached for Spec / Data Sheet
Solar PV System Size	(32) SHARP NU-235w = 7,520DC watts 7.52kW
Number of Arrays	4 arrays total
Azmuth	135 degrees
Tilt Angle	20 degrees
PV Watts Production (Yearly / Monthly)	12,692 kWhs AC / yearly ... see attached for break down monthly along with money savings

Estimated Saved Yearly	\$1,900 (based on 14 cents a kWh – average across service plans)
Actual Production	NA – APS login / Call Green Tag 602-216-0318
Code Compliances	
NEC National Electric Code	System meets NEC labeling / installation
AHJ / Permit	Yes

FINAL NOTES: You're GOOD TO GO. This solar system was well installed, grounding, labeling, points of attachments, solar panel and inverter placement are perfect. This installation was installed with quality equipment of the time of install (**Warning:** Enphase M-190's does have a high failure rate, found out years later). You can take comfort in knowing the solar system has great power output. While I can't see the exact amount of power, the digital meter display was changing values quickly which indicates high power output. The inverters are microinverter installed under the modules (solar panel) on the roof. As I looked under the racking I didn't see any red lights flashing, only green lights flashing (meaning it's producing power). I HIGHLY recommend getting module / panel level monitoring if the system doesn't already have it due to the M-190's microinverter past. You might have an inverter down and not know it. Monitoring is important to view from time to time, seeing blue is good (working), seeing black is not (means its not producing), you will want to replace just that one micro-inverter. There is a 15 year warranty on M-190s micro-inverters. The Sharp solar modules have a 25 year warranty. The solar modules looked great, clean and clear of bird etc.

This inspection was performed at 11am, the highest output of the day for this solar system based on azimuth.

Please see attached for (Dept of Energy) PV Watts calculation for your solar system. This calculation breaks down your solar system production and monetary savings monthly and sums it up for the year. It's fun to look over seeing the higher and lower outputs throughout the year. The monthly savings is always a favorite to view!

On the other hand, if you're having trouble sleeping, see attached data sheets regarding your solar modules and inverter. These data sheets are mainly for engineers to calculate string sizing along with voltage and amperage ranges. I include the data sheets in every report so the buyers can see the actual equipment used in their solar system, it also provides your warranty information.

I would be happy to compare actual system output to expected system output anytime in future at no additional fee. I receive power bills almost daily from Solar Inspection clients who just want to double check their solar production as well as their solar energy "credits".

Finally, APS offers different service plans. When / if you move into ANY **APS** home make sure you do **NOT** sign up with a rate plan that includes **DEMAND** charges (always go with a time of use service plan). I can help you with this when on-boarding with APS if you like, I have for this for many buyers (basically a conference call that last a few minutes).

If you have any questions / comments, please don't hesitate to reply / call.

Sincerely,

Mike Craig

Solar Fix LLC

www.solarfixaz.com

mike@solarfixaz.com

480-427-5913

