Keysight Technologies
Bench Instrument Site Check Table

Customer information		
Company name:	Keysight account rep:	
Contact person:	Sales order:	
Company address:	Keysight technical engineer:	
Telephone:	On site service order:	
Mobile phone:	Check date:	Time:

Note 1 Learn more about “Tips for preventing unnecessary repairs” at www.keysight.com/find/AvoidRepairs.
Note 2 Following recommendations refer to IEEE Std 446 (Power Supply Tolerance Curve of Computer Equipment) regulations and some special Spec. Requirements for the specific instruments.
Note 3 If AC power quality can’t fulfill instrument’s requirement, please evaluate to install Line Conditioner or UPS.
Note 4 If AC power quality is poor, please consult to qualified electric technician for improvement and follow up with confirmation with testing before re-boot AC power for instruments. Keysight instrument warranty scope is exclude of those damages that was induced by unqualified AC power source.

Site Check Conclusions: (remark with inspection location and time)

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	Check items	Expected specification	Tools	Check results
I.	**AC power quality**			
1	3-wire polarity	 AC power outlet, N-G voltage less than 1 VAC (but N & G can't be shorted on the outlet), N-L voltage 120 VAC.	– DMM – PGT-602 – Receptacle – Tester1933 – GAM-2A	
2	Voltage and Impedance between neutral and ground line (under full load)	Should be less than 1 VAC and 1 Ω. Grounding wire spec. 8 AWG, independent ground wiring.	– PGR75 – Fluke 434 – PGT-602	
3	Stable voltage, single phase 120 volt	120 V or 208 V +5%, –10% (i.e. 108 V ~ 126 V, 187 V ~ 218 V)	– Fluke 434 – RPM 901	Phase A to neutral: _____ Phase B to neutral: _____ Phase C to neutral: _____
4	Frequency	60 cycle (Hz) ± 0.5 cycle	– Fluke 434 – RPM 901	
5	Surge and sag voltage	Less than 120 V ± 15% can endure for max. 0.5 sec (30 cycle)	– Fluke 434 – RPM 901	
6	Impulse, transient voltage	If transient voltage > 100 VAC (up to 200 us), equipment may be damaged. Normally, ETE can stand for 150% ~ 200% VAC with max.0.2	– Fluke 434 – RPM 901	
7	Total harmonic	Less than 5%	– Fluke 434 – RPM 901	
8	Power factor	0.8 ~ 0.9	– Fluke 434 – RPM 901	
9	3-phase unbalance ratio	Less than 2.5%	– Fluke 434 – RPM 901	
10	3-phase load unbalance ratio	Each phase max. 5% ~ 20%	– Fluke 434 – RPM 901	
II.	**Environment**			
11	Temperature	20 °C –25 °C best with 23 °C		
12	Humidity	40% ~ 60% best with 50%	– Testo 615	
13	Air dust	The particle quantity should be less than 45,000 pieces within each cubic fee for those particle size > 0.5 micron		
14	Vibration	Less than 0.5 g		
15	EMI	Less than 0.5 V/M, Frequency range: 14 kHz ~ 1 GHz		
III.	**ESD process**			
16	ESD floor, desk, chair, mat, cloth, hat, shoe, wrap, bag, transit box, etc.	Floor resistance > 150 KΩ, < 20,000 MΩ. Refer to specific product spec, the surface resistance are between 103 to 1010 Ω, please refer to product data sheet.		
17	ESD fan	By necessary		
18	ESD charge measurement	For specific product, it may be able to just endure several volts ESD only	– ACL300 – ME-2B2A	

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