Item	Specification	Questions	DABS Answer
1	Neutral measuring element/Neutral Disturbance Detection Yes, meter shall have neutral elements/equipment and capabale of netural detection	What is neutral disturbance condition mentioned here? Does it mean the neutral bypass or other disturbance ?	It is comparing the N current with phase currents and can detect any illegal usage of meter
2	Power Quality Measurement As per IEC 62053-21	could you clarify detailed demand of this point?	It should record important electrical parameters like P, Q, S, V1, V2, V 3, I1, I2, I3, PF1, PF2, PF3, TDH (voltage and current)
3	Electromagnetic field detection sensor andrecording capability - The meter should be able to detect the electromagnetic field with electric strength of > 10V/m. When the electric strength is reached 10 V/m. as per IEC 6100-4-3.	As we know there is no this type sensor to detect the electromagnetic field with electric strength, usually this is an immunity feature, please confirm.	This feature is available in all produced energy meters in the world. Some local energy meter are out of this function It's mandatory according to DABS power network
4	Material of the meter cover Transparent Polycarbonate according to iEC specifications for direct connection, UV-stabilized, V-2 flammability class, according to UL94 specification	Does it acceptable that sample meter use non-transparent cover, and Transparent Polycarbonate cover used for batch delivery?	It's mandatory for all supplies meters
5	Material of terminal block connectors Terminals- Brass-Ni Plated with steel screw	Does the Brass material for connectors mandatory? 1) If not, does Iron galvanizing acceptable? 2) If yes, does Tinned Brass acceptable? Does the steel screw mandatory? Due to its cost is much higher, does the Iron galvanizing or Tinned Brass screws acceptable?	It's not changeable, The network condition and status need the mentioned specs. What it's requested we have to follow it. The main purpose is to avoid the terminal screw from break or damage during installation. To have high strength screw it's recommended the steel type.
6	Life Seal, Break to open with ultrasonic or Laser welded	Does the sample meter should be ultrasonic or no need ultrasonic?	By ultrasonic welding no one will be able to open the meter body cover until to break it.
7	Outdoor: IP 54/IP 55 IEC 60529 or equivalent to any international standards	Does manufacturer shall supply meter box or meter box has ready in DABS?	Meter box is not required
8	According to IEC Standard the diameter of holes shall be capable of 120% of equiredcoducior.i.e.DIN 43857-1,in accordance with this standard.	The DIN 43857-1 mentioned here only required for wiring holes diameter, right?	Yes
9	Meter Internal Memory Accessability after damage - YES	Does this mean VTC port or other port?	The VTC port is ok What we ask in this item that is the healthy condition of memory IC after damage. Then we are inserting the IC to another meter for Load and event log
10	even when the meter's case seals will be broken, the case will not be opened because of laserwelded. The serial number of the unique numbered plastic seal must be laser engraved at the junction of the upper and lower parts of the meter body.	Please kindly explain laser engraved at the junction of the upper and lower parts of the meter body, does it mean serial number printed on seal or meter body?	Serial number on meter body cove
11	short time 4kv spark protection required	could you please explain the 4kv spark test method and the expected test result?	it's as per the IEC standard and 4KV will be applied on meter then the meter accuracy will be tested in case of increase in Error the test result will be failed
12	Communication port :	Please clarify: except optical port, if there is no other communication port required?	Our requirement is optional communication Rest of them are options
13	General measurment and Display Parameters	Current,voltage,Frequency,Power factor,Active energy (import,export & cumulative indicated separately),Reactive energy (Capacitive & Inductive, import & export indicated separately),Apparent Energy (import and export indicated separately),Maximum demand, Tariffs,12 months Billing,Time & date,Temper(icons, count & information),meter serial no, and Harmonics.	THD is not needed for energy meter
14	place of use , outdoor	Clarify: what's the exactly installation scenario of meter? 1) is there any obstruction like under eave installation? 2) Or without any obstruction like pole installation? 3) Does meter will be installed in meter box?	when the meter installation is outdoor the meter should be stable for any outdoor situations
15	degree of IP54/IP55		
16	load profile	Clarify: 1) does it mean data should be stored in the NVM of meter at least 2 years? 2) what is the load profile capture interval required?	1. Yes. NVM 2. 15 Minutes
17	electronic terminal cover tamper detection. Yes with min time	Clarify: does it mean to detect if the terminal cover opened?	it should record each openning time of terminal cover
18	type test witness, the type test should be performed at the presence of DABS engineers	Clarify: is it only for the FAT?	Yes. It's FAT Only
19	short time 4kv spark protection required	Clarify: could you please explain the test method and the expected test result?	The 4KV will be injected to the meters , for a time durration as per the IEC standard, In cause no lekeage and if the accuracy doest effect then the test shall be pass.
20		Clarify: is there any communication module and internal relay required?	Relay is not required
21	Operating voltage for single phase:100-276V, Equal to 0.43-1.2Un Limiting operating voltage:0-1.2 Un Operating voltage for three phase:100-450V, Equal to 0.43-1.2Un Limiting operating voltage:0-1.2 Un	Clarify: This DABS voltage requirement is different from the IEC standard. IEC standard is 0.9-1.1Un for operating voltage and 0-1.15Un for limiting operating voltage. In Sicem report, they follow the IEC standard. Our samples will meet the DABS requirement.If required, we will test the samples based on DABS requirement after contract award. also what is the phase voltage mean? Does it L-N or L-L ?	The Voltage limit is according to the DABS network requirement L-N= 100V-276V L-N= 173V-1150V
22	Communication port: Optical Port IEC 62056-21:2002, it should be sealed or so, no access without breaking the seal and protected by software keys.No one can access the meter through optical port without having the unique key of the meter	Clarify: For now, meter cover can not support to seal the optical port.Is it acceptable ? For sample meters, we will provide the 3D printing upper case to have this sealed optical design. After contract award, we will open the mold tool to make this ready for batch order. For 3D printing upper case, it can not withstand the mechanical test. This problem will be solved after contract award when mold tool is ready	we did not ask for the meter sample
23	Altitude	2800 m	2800m
24	operating voltage 100~450 phase voltage	Does 100V is L-N and 450V is L-L ?	Operating voltage L-N 100V and L-L 450 V
25	No. of digits for energy, minimum 6 digits	Clarify: does it mean energy display shall be 6+3, like 123456.789 kwh? Or 8-digit also acceptable, like 123456.78 kwh?	We asked for 6+3 (123456,789)
26	No. of available decimal, minimum 3 digits		
27	RTC battery life	it needs to be as much as the meter's service life	it needs to be as much as the meter's service life
28	PCB battery life	5 years replacable, or 10 years if it is PCB integrated	5 years replacable, or 10 years if it is PCB integrated
29	Humidity	Zero to 98 %, non condensing (IEC 62052)	0.98
30	Part III Contract	The Contract Price, including any Advance Payments, if applicable, shall be paid as specified in the SCC. GCC 16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be as follows: Payments are made in the currency of the Bid (USD) for the actual supplied goods based on the delivery schedule against the requested documents specified in GCC Clause 13 for each shipment/ delivery in the following manner	Advance payment is not applicable
31	POST-QUALIFICATION REQUIREMENTS (ITB 38)	APPLICABLE	Average Annual Turnover: The bidder shall submit in its bid audited balance sheets, or if not required by the Law of the Bidder's country, other financial statements duly audited acceptable to the Procuring Entity with minimum average annual turnover of at least: USD 5,500,000 (US Dollar Five Million & Five Hundred Thousand $) as total certified payments received for contracts in progress or completed, for the average of last (5) five years.	Yes
32	In item 21 of Energy meter spec it is ask for export and import energy measurement.		Yes the meter should measure the energy in both direction and it should indicated in separate obis code as 1.80 for the energy import the 2.80 for the imort energy and the 15.80 the sum of import and export energy.
33		Is it possible that we can use SABS certificate for meter ?	Please follow the DABS technical spec as described in item 69.
34		For meter cover can we use cool gray color with no seal function?	It is not acceptable, Please submit your offer based on DABS technical Specs.
35		Tariffs and Seasons – Minimum 6 tariffs with 6 intervals, 2 Seasons.;	It is not acceptable, Please submit your offer based on DABS technical Specs.
36		We have 4 tariff and 1 season.	
37		Electronic terminal cover and body covers tamper detection – Yes Each opening time and date must be recorded individually. We have only terminal cover Opening detection don't have Top cover open detection. Will it work	It is not acceptable, Please submit your offer based on DABS technical Specs.
38		No of available decimal – minimum 3 digit; we support for 2 digit will it work	It is not acceptable, Please submit your offer based on DABS technical Specs.
39		We don't have transparent meter cover we have opec casing (white colour).	It is not acceptable, Please submit your offer based on DABS technical Specs.
40		Material of Terminal cover – Transparent Polycarbonate. we have opec casing (white color), will it work?	It is not acceptable, Please submit your offer based on DABS technical Specs.
41		Meter Body – Life sealed, Break o open with Ultrasonic welded or Laser welded	Ultrasonic (Never possible to open the cover).

42		in our casing don't have provision to ultrasonic weld or leaser welding.	It is not acceptable, Please submit your offer based on DABS technical Specs.
43		Comunication Port – optical port, It should be sealed or so no access without breaking the seal.	With Seal
44		We don't have sealing provision for optical port.	It is not acceptable, Please submit your offer based on DABS technical Specs.
45		General measurement and display parameters – Current, Voltage, Frequency Power Factor Active Energy (Import, Export and Cumulative indicated separately) Reactive energy (Capacitive and Inductive, Import and Export Separately) Apparent Energy (Import and Export Separately) Maximum Demand, Tariff, 12 month Billing, Time and Date, Tamper (Icon count and Information), Meter Sr. No., and Harmonics.	The THD is an option
46		we are not meeting Reactive energy (Import and Export Separately) and only 3rd Harmonics we can support.	Please submit your offer based on DABS technical Specs.
47		We can store that data in meter memory for load profile for 45days, bill profile =12 months. MDM should store data for the last 2 calendar years.	It is not acceptable, Please submit your offer based on DABS technical Specs.
48		Max Demand – Max, Average and Min demand must be available.	It is not necessary
49		I'm not sure what is min demand but we have Max demand.	The question is not clear
50		After checking all the specs, technially for meters, No problem. We have qualified products.	Based on DABS technical spec for the energy meters the type test requested to be from:
51		For the type test certificates, we type test reports from SICEM. Full name is China Quality Supervison and Inspection Center for Electrical Measuring Instruments. It's China goverment lab, the most powerfully lab in China. And they are Ilac , CNAS legalized international lab. It's same powerfull as KEMA/MID in the world.We want to make sure, if these type test reports are qualified for the biding.	The China Quality Supervision and Inspection Center for Electrical Measuring under the government of China which the symbol is SICEM .One of the LAB which are controlling the quality of China electrical measurements equipment.Therefore any issues test or certificate or report by the SICEM is acceptable for us.
52	DABS's Technical Requirement single phase Digital Energy Meter and three phase Digital Energy Meter	Is the type test certificate from any other ISO17025 accedited labs (instead of the aforementioned labs) acceptable ?	The ISO17025 is acredited Lab for the Medical or blood test Lab.
53	Material of terminal block connectors Terminals- Brass-Ni Plated with steel screw	our meter terminal is sleeve type, as the red marking in the picture shown , part 1(tinned copper) pass through the current, part 2(galvanized steel) used to tighten cable, does it acceptable or part 2 also should be tinned brass ?	Tinned Copper is also OK.
54	RTC battery life - it needs to be as much as the meter's service life	For our meter, the RTC was integrated in the MCU, so If the meter PCB integrated battery can support 10 years life, does it acceptable that only 1 PCB battery (no other super capacitor or battery) ?	If you check the technical spec, our suggestion is the same as you mentioned.
55	PCB battery life - 5 years replacable, or 10 years if it is PCB integrated		
56	even when the meter's case seals will be broken, the case will not be opened because of laserwelded. The serial number of the unique numbered plastic seal must be laser engraved at the junction of the upper and lower parts of the meter body.	Does this requirement means the meter serial number that printed on the meter nameplate? If not, it is much better to show us a picture about this point	
57	short time 4kv spark protection required	I checked from IEC62052-11 and IEC62053-21, there are 3 tests which 4kV voltage will be presented : 7.5.4 Fast transient burst test 7.5.6 Surge immunity test 7.4 AC voltage test Could you indicate which one is the spark protection you described?	7.5.4 Fast transient burst test 7.5.6 Surge immunity test 7.4 AC voltage test
58	Demand Reset Function． Available with minimum 12 programmable records like each month's record of total energy	Could you clarify this point in detail, does it mean you need the function to reset all demand records? Does the meter need a button for demand reset or demand reset by meter software?	The Demand reset is special feature by which we specify a date for every month for example , Jan 25, Feb 25. Whenever the date reached to Jan25 the meter will capture the energy regester . Then if the date reach to Feb 25 the meter will capture next energy regester. By this function the energy meter will have in itis record the last 12 months (as 12 different reading for each specify date).
59	General Mietering Parameters (as per item #58), The data should be stored minimum for the last 2 calendar years	The same question with first time, could you clarify the second point: 2) Please confirm '12 months Billing, Temper (icons, count & information), meter serial no. and Harmonics.' is not applicable to captured in load profile.	Your question is mixed up, but what I got that is (1)- We want the recorded Load profile for two calendar years (2)- The Record caputure time is 15min (3)-