GTP of 1 Ph DLMS Energy Meter			
S.No	**Description**	**Units**	**Requirement of GED**
1	Type of meter		Single phase two wire ,whole current meter− direct readingtype without application of any multiplication constant.
2	Accuracy Class of the meter		1
3	Ib & Imax	A	Ib-10, Imax-60
4	Operating Voltage	V	240V ± 1%
5	Operating Frequency	*Hz*	50
6	Power Consumption and Burden		Voltage circuit: Maximum 1.5 W and 10 VA Current Circuit :Maximum 1 VA
7	Starting Current	mA	20
8	Short time over current	A	1800A for o.1sec
9	Influence of heating		Temperature rise at any point of the external surface of the meter shall not exceed by more than 20K with an ambient temperature at 450 C.
10	Rated impulse withstand voltage	KV	6
11	AC withstand Voltage for 1 min	KV	4
12	Insulation resistance a) Between frame &Current, voltage circuits connected together: b) Between each current(or voltage circuit) & each and every other circuit.	M ohm	5 M ohm 50 M ohm.
13	Mechanical requirement		As per clause 12.3 of IS 13779
14	Resistance to heat and fire		The terminal block and Meter case shall ensure safety against The spread of fire. They shall not be ignited by thermal overload of live parts in contact with them as per IS 13779. Fire retardant material shall be used.
15	Degree of protection		IP 51 as per IS 12063
16	Resistance against climatic influence (as per IS 13779)		As per clause 12.6 of IS 13779.
17	Electromagnetic Compatibility (EMC)		As per CBIP Technical report no 325 (latest amendment)

18	Accuracy requirements		As per Clause 11 of IS 13779
19	Power factor range		Zero lag to Zero lead. & meter shall be programed at default 'lag only configuration i.e. Lead to be treated as unity for kVA & KVAh calculations'
20	Energy measurement		Fundamental energy +Energy due to Harmonics
21	Connection Diagram for system on terminal cover		The connection diagram for the system shall be provided on terminal cover.
22	Self−diagnostic feature		The meter shall have indications for un satisfactory f non−functioning of (i) Time and calendar (ii) Real Time Clock (iii) RTC battery (iv) Non Volatile Memory
23	Initial startup of meter		Meter shall be fully functional within 5 sec after reference voltage is applied to the meter terminals.
24	Terminal block		
	a) Depth of the Terminal holes	mm	9.5mm (minimum)
	b) Internal diameter of terminal holes	mm	20mm
	c) Clearance between adjacent terminals	mm	10 mm (minimum)
25	Communication capabilities		should DLMS compliance for communication with the meter at optical port and RJ11 port.
26	Immunity against abnormal Magnetic influence		Meter shall record accurate energy in case of any external influencing signals in line with IS 13779:1999 Cl.11.2 and variation in limits of error (upto 100% Imax) shall be as per the table 17 of IS 13779
27	Immunity against HV ESD		Meter shall be immune up to 50 kV and shall record accurate energy as per IS−13779:1999
28	DC Immunity		Continuous DC magnetic induction: >0.67 milli Tesla ± 5%(Value of the magneto motive force to be applied shall be generally >17500 ATs, Should be immune up to 0.67 Tesla) after log will recoard.
	Grade of material for		
	a) Meter base		(a) Meter base shall be opaque with polycarbonate LEXAN 500R or equivalent on prior approval from the GED.

29	b) Meter cover		(b) Meter cover shall be transparent with polycarbonate LEXAN 143Rƒ943A or equivalent on prior approval from the GED.
	c) Terminal block		(c) Terminal block should be in single mould with meter body base. (Not separate)
	d) Terminal cover		(d) Terminal cover shall be short type and shall be transparent with polycarbonate LEXAN 143Rƒ943A or equivalent on prior approval from the GED.
30	Tamper counts		The meter should not have any other event logging or any logic other than desired in specs. All other logics not mentioned in specs should be removed or disabled in meter firmware.
31	Recording forward energy in all conditions (including currentƒpotential reversal)		Yes
32	Makes of all components used in the meter.		Yes
33	Non Volatile memory (Retention period)		10 Years
34	Measuring elements used in the meter		kWh kVAh
35	Power supply to circuit in case of supply failure		In case of power failure, readingƒdata shall be to downloaded with the help of battery
36	Display of measured values		The meter shall be capable of recording load profile of 45 days 30 min IP for kWh, Voltage, and phase / neutral Current (whichever higher) for ON days/time
37	LCD display (Type and viewing angle)		The LCD display shall have a wide viewing angle of 120 degree. When the meter is not energized the electronic display need not be visibleThe display shall not be affected by electrical, magnetic disturbances and ESD. The back lit must be green in color while in normal registration modes. Phase Indication should be Green LED only. Display Size 10mm x 5mm
38	Pulse rate	Imp/kWh, Imp/kVArh	3200
39	Name plate marking	Yes/No	Yes
40	Routine test certificates	Yes/No	Yes
41	Acceptance test certificates	Yes/No	Yes
42	Type test certificates	Yes/No	Yes
43	Guarantee certificates	Yes/No	Yes