Gem/AVM/2018/weigh bridge	Gem Version 3.0	Draft 2	2.10.2018
Creator & Moderator : Shri A.V.Muralidharan (Dy. CEO GeM)		Approver :Shri A.K. Kamra (Ad. CEO GeM)	

461800 Sub category- - UNSPSC Code:

Electronic WeighBridge (Without Civil Work) : UNSPSC Code - 46182399(T.)

S.No.	Parameters	Grouping	Type of Values	Value 1	Value2	Value3	Value 4	Value5	Validation	Whether Filter Required	Golden Parameters	Remarks	Priority	Unit	Demand Aggregation
1	The weigh bridge shall be rugged design with robust load cels and high quality precision Manufacturing	P	E	Yes							G				
2	Scope of Supply for the weigh bridge	P	E	Weigh Controller,Load Cells,Platform,Large Size LED Display,PC,Printer,UPS, , Model approval ,Verification Stamping from legal metrology Dept ,Ramp(in case of portable only)							G				
3	ProvIding Required test load	P	E	Yes	No(Seller not providing and buyer to arrange same)						G				
4	The test load requirements Provided	D	E	500 kg	1 ton	2 ton	3	5			G				
				10	NA(in case seller not providing)										
5	Scope of Supply do not Involve Civil work such as Foundation work,Cabin Construction and site preparation associated with installation of Weigh Bridge	P	E	Yes							G				
6	The required civil work regarding foundation ,cabin etc as applicable shall be got completed by buyer or consignee through their resources and seller shall furnish required drawing and other relevant information for approval immediately within 2 weeks of reciept of order	P	E	Yes											

7	Type of Weigh Bridge	P	E	Surface Mounted	Pit Mounted	Portable (Movable)					G				
8	Maximum Capacity of weigh Bridge in Tonnes	P	E	20	30	40	50	5			G				
				60	80	100	120	10							
9	Graduation of weigh bridge in KG			2	5	1	10	20							
				50											
10	Before supply of components of bridge the drawig of the entire set up should be got approved from the buyer/consinee	P	E	Yes											
CONSTRUCTION FEATURES															
11	The design of weigh bridge shall be such that access to all load cells possible with minimum strain	P	E	Yes											
12	The type of Construction of Weigh Bridge Plat form	P	E	Modular enabling easy Assembly ,Transportation and adjustment of	Fully welded structure						G				
13	The details of platform construction with outline to be indicated in the drawings	P	E	Yes											
14	The Material Used for Platform Structure	D	E	Mild Steel meeting requirements under IS 2062											
15	Length of the Platform required for weighing in meters	P	E	7.5 m	9m	12m	16m	20		6	G				
				18m	24	4.5									

16	Width of the Plat form in meters	P	E	3m	4m	4.5m					G				
17	Anti skid feature for Platform	P	E	Yes											
18	Ramp length in mm	P	T	1:10 for portable for 1 feet height 10 feet length	NA (For surface Mounted and Pit mounted)										
19	Weight of Platform structure in Kg	D	N												
20	Protection from rust and corrosion by way of suitable treatment and painting for the platform structure	P	E	Yes							G				
21	The platform structure should be able to bear twice the maximum capacity of weigh bridge	P	E	Yes											
Load cell															
22	Capacity of Load Cell in Tonnes	P	E	10 ton	20 Ton	30Ton	40 Ton		2	5	G	45			
23	No of Load Cell in the weigh bridge system	P	E	4	6	8	10		12		G				
24	Type of Load Cell	P	E	Compression Type	Double ended Shear Beam Load Cell						G				
25	Accuracy Class of weigh bridge	P	E	Class III											
26	Load cell technology	P	E	Analog	Digital						G				
27	Material of Body of Load Cell	P	E	Stainless Steel	Nickel plated Alloy steel						G				
28	Load cell to be hermentically sealed	P	E	Yes											
29	Protection class for load cell	P	E	IP 65	IP67	IP 68					G				

30	Certification required for for load cell	P	E	RRSL	OIML						G				
31	Load cell to be protected from lighning	P	E	yes											
32	Auto rotation lock	P	E	yes for compression type load cell	NA(For double endede shear beam load cell)						G				
33	shall be provided with water [roof connections	P	E	yes											
34	Cabling for load cell	P	E	shielded 4 conductor cable											
35	LENGTH of cable Provided for load cell in meters	P	E	6	9	12					G				
36	Should provide required cable from load cell to controller as per approved drawings	P	E	yes											
37	Excitation Voltage in volts	P	E	0 to 15 V											
38	Maximum Rated Out Put of the Load Cell in mv/Volt	P	N												
39	Load cell shall be provided with overload protection	P	E	Yes											
40	Operating temperature range	p	E	Minus 20 to 50											
41	load cell shall withstand hostile conditions due to extreme temperature ,lightning wind shock and	P	E	yes											
42	shall be provided witb automatic diagnostics	P	E	Yes	NO						G				
43	shall be unaffected by off centre loads	P	E	Yes	NO						G				

44	canister design to be strong enough to withstand wear and tear and accidental damage due to harsh usage	P	E	YES											
45	Rated ouput Repeatability in terms of FS	P	E	0.05%	0.01%						G				
47	Overload rating SAFE	P	E	125%	150%						G				
Weigh Bridge Controller															
48	Weigh Bridge Controller shall be micrprocessor based	P	E	Yes											
49	Microprocessor Speed in MHZ	P	N								10<				
50	Memory capacity in GB	P	N								1<				
51	Electric Power Supply Requiremnts for the weigh bridge Controller	P	E	single phase											
52	The power supply shall be with EMI/RFI Filter and Spike Supressor	P	E	Yes											
53	Type of Analog to Digital Converter	P	E	24 Bit							G				
54	Conversion speed of analog to digital converter in MHZ	P	E								!8<				
55	Key Board Port for connecting	P	E	Suitable PC Comaptible key											
56	Key Board Details of controller	P	text												
57	High voltage protection	P	E	yes											
58	Housing Protection for Digital Controller	P	E	IP 40	IP 60	IP 65									
59	Printer Port with controller	P	E	yes											
60	Details of Printer type	P	E	dot matrix 80 col	laser printer						G				
61	Printer Make	P	E	epson	tvse						G				
61	Serail Port Provided	P	E	yes											
62	USB port provided	P	E	yes	no						G				

63	No of digits of led displayfor weight	P	E	8	6						G				
64	Minimum character size of LCD Display	P	E	16x2	32x2	40x2					G				
65	Type of informations displayed	P	E	Weight,Date and Time,vehicle no											
66	Provision for remote Display port	P	E	Yes	No						G				
67	Autoflicker display of weight	P	E	yes											
68	Configuarble zero tracking	P	E	yes											
69	over and under range indication	P	E	yes											
70	Tare indication	P	E	yes											
71	Remote display to be connected to red LED seven segment display to indicate weight on platform	P	E	Yes											
72	Display shall be configurable with decimal points	P	E	yes											
73	Type of reports which can be generated from the system	P	E	Date wise, Monthwise,Customer wise,Serial No wise,vehicle wise											
74	Input Power Supply Requirements	P	E	Single Phase 230 V 50 HZ											
75	Power consumption of controller unit in watts	P	N												
76	Dimensions of unit	D	text												
77	Operating temperature	P	E	minus 20 to 50											
78	Weight of controller unit in KG	D	N												
79	Protection class for junction box for connection	P	E	IP 65	IP 66	IP 67	IP68				G				
80	Surge protection for junction box	P	E	yes	no										
81	Connection type for junction box	P	E	Terminals on PCB Mounted inside JB											
82	Material of construction for junction box	P	E	ABS	MILD STEEL	STAINLE SS STEEL					G				

83	UPS to be provided with the system	P	E	Yes	no										
84	Capacity of UPS	P	E	1000KVA	NA(if not provided)						G				
85	Back up time in hours	P	E	2 h	4	6	NA if UPS not provided				G				
86	System should be capable of giving connection to external it network system through suitable and reliable communicate cables and ports	P	E	yes											
87	Weigh Bridge management Software	P	E	User friendly Software for processing data date wise, truck wise, challan wise, shift wise, customer wise etc. for generation of daily / Weekly & monthly report. Preparing Transport Permit, Invoice etc.											
88	Print out Provided by System	P	E	Monogram,address with phone,no,date at time of weighing,vehicle registration,gross weight,net weight,tare weight in kg,item particularly desription in minimum 32 space alphanumeric mode											
89	Electrical work	P	E	All electrical connection from weigh bridge to our automation control room or as adviced by buyer and laying of the cables for complete integration of the Weighbridge. Providing all required socket, switch, cable, junction box of good quality to be used for weigh bridge.							G				
90	All electrical equipment shall be tropicalized and shall have IP 54 Protection	P	E	Yes											
91	Provision of Earthing	P	E	Earthing to be provided as per IS-3043.											
92	Operating manual in original copy 3 SETS and Drawings and circuit diagrams to be provided	P	E	Yes											
							ADDITIONAL ITEMS								
93	FLOURSCENT LAMP WITH DRIP PROOF PROTECTIVE COVER TO BE PROVIDED FOR MAINTANANCE UNDER PLATFORM	P	E	YES											

94	Spot light with suitable long cable to be provided	P	E	yES											
95	Number of additional load cell to be supplied	P	E	1	2	3	Not supplied								
96	Itemised break up of mechanical and electrical spares used on the machine in sufficient quantity as per recommendations for 2 tyear trouble fee maintanace on 2 shift contionous running basis TO BE INDICATED	P	E	Yes											
97	The supplies will be deemed to ebe completed only after installation and obtaining stamping of legal metrology Dept	P	E	Yes											
						Doumentation									
98	operating manual of machine 3 sets in english and laungage specified to be supplied	P	E	Yes											
99	Programming Manulas	P	E	Yes											
100	Training to be given to officials of the Buying Organisation	P	E	Yes											
101	Complete software for auto calibration and smart calibration minor weight correction by software shall be provided	P	E	Yes											
102	Warranty Period	P	E	1	2	3	4	5			G				

103	Stamping of Weigh Bridge final calibration	P	E	liaisoning with the inspector of Legal metrology department (Weight and Measure Deptt), for verification and Stamping of Weigh Bridge and also paying the required fee to Legal Metrology department											
104	Details of Certification of RRSL	P	T												
105	Details of OIML Certifications	P	T												
106	Copies of certifications and reports shall be submitted to buyer on demand at time of supplies	P	E	yes											