

UPS Battery Terms of Reference for Galaxy VS model GVSUPS100KD (Ntoma Ground station)

I. INTRODUCTION

Locus Dynamics Ltd. (LD) is a Rwandan systems engineering and integration company specializing in Aerospace & Robotics, IT, and Security Solutions. The company provides services such as engineering, project management, drone operations, consultancy, and training, with a vision to grow to other African Markets.

LD operates a **Teleport facility in Nyagatare District**, about **170 km from Kigali**, which supports its core operations.

To ensure reliable backup power for critical systems at this facility, LD is seeking to **procure high-quality UPS batteries**, including delivery, installation, and warranty support, in line with its technical requirements.

2. OBJECTIVES OF THE TERMS OF REFERENCE:

The primary objectives of this document are to outline the Terms of Reference (TOR) for the procurement of the UPS Batteries for Galaxy VS model: GVSUPS100KD

3. SCOPE OF WORK

The selected supplier shall be responsible for the delivery, installation, and commissioning of Uninterruptible Power Supply (UPS) batteries in accordance with the company's technical and operational requirements. The scope includes the following obligations:

Product Compliance and Supply

- Supply UPS batteries that meet the required technical specifications provided by the company on point 5.
- Ensure all batteries are new, unused, and sourced from reputable manufacturers.

Delivery

• Deliver the UPS batteries to the designated location in **Matimba Sector**, **Nyagatare District**, within the agreed delivery timeline.



• Ensure safe transport and handling to prevent damage during delivery.

Installation and Commissioning

- Install the UPS batteries at the designated site and integrate them with the existing UPS system.
- Conduct full system testing to verify proper installation and ensure the batteries function correctly.

4. WARRANTY AND SUPPORT

The supplier shall provide a warranty period of twelve (12) months from the date of delivery.

During the warranty period, the supplier shall replace any damaged or defective UPS batteries at no additional cost to the company.

The warranty shall cover any manufacturing defects or failures occurring under normal operating conditions.

5. TECHNICAL SPECIFICATIONS:

The UPS Batteries to be procured must meet the following technical specifications:

I	Battery Type:	AGM		
2	Nominal Voltage:	I2V		
3	Rated Capacity:	100 Ah/C20Hr/1.75VPC/270C		
4	Dimensions (±2mm):	Length: 393 mm (15.47 in.)		
		Weight: 173 mm (6.81 in.)		
		Total Height: 221 mm (8.70 in.)		
5	Weight (± 5%):	31.5 Kg (69.45 Lbs)		
6	Terminal Type:	M8 x 25mm Copper terminal		
7	Capacity @ 270C	93.10 Ah (10hr,9.31 A, 10.5 V/battery)		
		85.75Ah (5hr,17.15 A, 10.2 V/battery)		
		63.70 Ah (Ihr,63.70 A, 9.6V/battery)		
8	Capacity affected	400C (1040F)	110%	
	(Temperature at C20 hr rate)	270C (80.60F)	100%	
		00C (320F)	80%	



		-150C (50F) 60%	
9	Case Material:	Standard PPCP (12AL100N)	
		FR Version UL 94-V0 (I2ALZ100N)	
10	Internal resistance (IR):	Approx. 5.60m Ω for a fully charged battery (270C)	
11	Short Circuit Current (As per IEC)	2220 A	
12	Operating Temperature range	-200C to + 600C (50 to 600C for shorter duration)	
13	Nominal Operating Temperature range	270C ±30C	
14	Standby use (270C)	Charging Voltage 13.5 V/battery	
		Charging Current Max.25% of rated capacity	
		Temp. compensation ± 18mV/battery/0C	
15	Cycling use (270C):	Charging Voltage 13.8 V/battery	
		Charging Current Max.25% of rated capacity	
		Temp. compensation ± 30mV/battery/0C	
16	Self-Discharge:	< 4% per month at 270C	
17	Quantity	40 Batteries	

6. EVALUATION CRITERIA:

Proposals submitted by potential suppliers will be evaluated based on the following criteria:

a) Technical Compliance

The proposed UPS batteries must fully comply with the technical specifications provided in the procurement documents. Proposals that fail to meet the minimum technical requirements will not be considered.

b) Regulatory and Standards Compliance

The UPS batteries must comply with all applicable industry standards and regulations related to safety, performance, and environmental requirements.

c) Supplier Qualification and Experience

The supplier must demonstrate relevant experience in supplying and installing UPS batteries. This includes:

A proven track record of successful deliveries,



• At least **two (2) reference certificates** or recommendation letters from previous clients for similar projects.

d) Cost-Effectiveness

The financial proposal must offer a competitive price while fully meeting the technical, functional, and operational requirements of the project.

e) **Delivery Timeline**

Preference will be given to suppliers who can guarantee **the shortest delivery and installation timeframe** without compromising quality or compliance.

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