



**KERALA CO-OPERATIVE MILK MARKETING FEDERATION LTD.**  
**CENTRAL PRODUCTS DAIRY, PUNNAPRA P.O, ALAPPUZHA – 688 004.**  
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Office copy

Sir,

Sub: Enquiry for Online UPS without batteries for pouch filling machine.

Competitive offers are invited for the supply and installation of 50 kVA UPS at our dairy. Interest parties can visit our dairy for verifying the location of UPS installation and to submit their offer.

### **Technical Specifications**

#### **Design requirement and Scope of supply**

<b>Sl. no.</b>	<b>DESCRIPTION</b>	<b>SPECIFICATIONS</b>
<b>1.</b>	<b>CAPACITY</b>	50 KVA
	Inverter & Rectifier	IGBT
<b>2.</b>	<b>INPUT</b>	
	INPUT VOLTAGE	<b>415 V AC, Three Phase, 50 Hz</b>
	Input Voltage Range	300 V AC to 450 V AC
	Input Frequency Range	45 to 55 Hz
	Input Over Voltage Protection	450V AC
	Input Under Voltage Protection	280 V AC
	Over Voltage cut off	Should be offered externally
	Input harmonic management	Suitable filter to be provided
<b>3.</b>	<b>OUTPUT</b>	
	OUTPUT VOLTAGE	415 V AC Three phase $\pm 1\%$
	Frequency	50 Hz $\pm 1\%$
	Power factor	0.8 Lag to Unity
	Isolation	Output load be isolated through a transformer with same rating
	Output Over Voltage Protection	245 V AC Single Phase
	Output Under Voltage Protection	210V AC Single Phase
	Over load capacity	125% of rated load for 60 sec
	Total Harmonic Distortion	Less than 3%
	Short circuit protection	Soft Shut down should occur without blowing any fuse
	Crest Factor	3 : 1
	Wave form	Pure sine wave
<b>4.</b>	<b>ISOLATION</b>	
	Manual Bypass switch	Should be provided
<b>5.</b>	<b>INDICATIONS</b>	
	Over Temperature	Required
	Load on Battery	Required
	Battery on Charge	Required
	Battery low	Required
	Mains on	Required
	DC on	Required

	Inverter on	Required
	Inverter Tripped	
	1. Output Over Voltage	Required
	2. Output Low	Required
	3. Over Load	Required
<b>6</b>	<b>EFFICIENCY</b>	
	Overall Efficiency	>90%
	Inverter Efficiency	>90%
<b>7</b>	<b>METERING</b>	Separate/Single Digital Meter
	DC Voltage	Required
	DC Current Charge/discharge	Required
	Output Voltage	Required
	Output Current	Required
	Input Voltage	Required
	Digital three/three & half freq. Meter (for Both input & output)	Required
<b>9.</b>	<b>Audible Alarm for Following Conditions</b>	
	Battery Low	Required
	Mains Failure	Required
	Inverter Under-voltage	Required
	Inverter Over Voltage	Required
	Over Temperature	Required
	Inverter Overload	Required
<b>10.</b>	<b>Environmental</b>	
	Operating Temperature	<45 Deg C
	Humidity	10-90 % (non-condensing)
	Noise Level	<50 dB at full Load from 1 mtr distance
<b>11</b>	<b>Cabinet</b>	CRCA sheet with powder coated finish.
<b>12</b>	<b>Scope of installation</b>	Connect the new UPS to the existing batteries and take trial run with connected loads.

### Terms and Conditions

- **Price Basis:** The price should be inclusive of all taxes, levies including packing and forwarding, freight, transit risk insurance etc. but excluding unloading charges.
- **Payment:** 90% Payment will be released after the successful commissioning of the UPS against Guarantee Certificate and balance after warranty period.
- **Warranty:** The item shall be free from manufacturing defect and shall be warranted for a minimum period of 2 years from the date of commissioning.
- **AMC:** You should submit the offer for AMC for a period of 3 years after completion of warranty period
- **Delivery:** Within 20 days from the receipt of the order.
- The offer should be sent in sealed cover superscribed 'QTN FOR UPS' due on 09.12.2020.
- The sealed quotations shall reach our office on or before 2 P.M on 09.12.2020 and will be opened at 2.30 P.M on the same day.

Yours Sincerely,

*V.S. Kumar*  
MANAGER

