



**THE FASTEST
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Ucom CJSC

PROCUREMENT OF UPS device (MAXIMUM POWER 200 KW)

Request for Proposal

Request for Proposal

REPUBLIC OF ARMENIA

UCOM CJSC, PROCUREMENT OF UPS DEVICE (MAXIMUM POWER 200 KW)

RFP No: UC – 251995

1. General Conditions

1.1 Introduction

Ucom CJSC is a broadband service provider with licenses for voice, international gateway, and Internet services.

This document comprises Ucom CJSC and appears as a Request for Proposal (RFP) for the **Procurement of UPS device (Maximum Power 200 KW)**.

Ucom CJSC hereby expresses an intention to enter into a contractual agreement for the procurement of the UPS device with specified technical specifications, subject to mutual agreement and terms specified in this RFP.

1.2 Requirements

- The successful bidder is expected to supply a HW, described in the Technical requirements. /**appendix 1**/; and organize the installation of the proposed UPS equipment in an office space in city of Yerevan.
- The Bidder may substitute alternative solutions, provided that it demonstrates to the Purchaser's satisfaction that the use of the substitute(s) will result in the System being able to perform substantially equivalent to or better than that specified in the Technical Requirements, however before the solution modification the bidder should seek for a Purchaser's approval, beforehand.
- Required latest delivery period including production should be **90 calendar days** starting from contract signing and order placement.
- The Supplier shall provide the supporting documentation, including user manuals in the English or Russian languages.
- Along with Commercial proposal, the local suppliers/organisations of the territory of Armenia must complete and provide us with the document "**Appendix 2 for Partner Candidates**" in signed and sealed form.

1.3 Price Proposal - The price proposal should be prepared using the form of **Appendix 2**, specifying words and figures, as well as the various amounts and the respective currencies, delivery deadlines and payment terms. We emphasize that payment terms are a key factor in the decision making process, so having a postpaid component and minimizing the prepayment requirement will be a plus. For participants proposing a **UPS device**, kindly request to provide a proposal in accordance with the technical requirements and submit their most competitive commercial offer for our evaluation.

- 1.4** It is necessary that the company or official distributor of the branded products specified in the price offer and/or subject to sale, authorizes and certifies the Participant of the RFP on its official letterhead (copy of the certificate) that the Participant of the RFP hereby has the right to sell to Ucom the products specified in the **appendix 3** in a completely new, unused condition, and the Participant must include this sealed document in his application for participation in the RFP.

2. Other requirements

- 2.1** Authorized representatives of the eligible bidder shall be entitled to request clarifications regarding all of the RFP documents by submitting requests by e-mails to: Mr. Hmayak Yezekyan (hmayak.yezekyan@ucom.am) and Mr. Armen Mikayelyan (armen.mikayelyan@ucom.am). Any amendments to the RFP made as a result of a request for clarifications will be sent to all prospective Bidders.
- 2.2** At any time prior to the deadline for submission of proposals, Ucom may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, amend the RFP, cancel the RFP process, veto any, by Supplier, proposed assigned team member(s) in Supplier's team. The request for clarification and the response shall be in writing.
- 2.3** The Supplier shall bear all its costs for the tendering and RFP process. Ucom shall under no circumstance be liable for any cost for Supplier's tendering process, regardless of whether or not the Supplier is selected.
- 2.4** The proposal prepared by the Bidder and all correspondence, documents, descriptions, and instructions related to the proposal exchanged by the Bidder and Ucom shall be written in Armenian or English.
- 2.5 Sample Submission for Testing Purposes:** *During the evaluation period, the bidding entity may be requested by Ucom CJSC to provide samples of the proposed product/service for thorough testing and assessment by the evaluating team, which should be provided in the agreed timing (but no longer than 14 calendar days). The purpose of this requirement is to ensure that the offered solution meets the stated requirements and standards outlined in this RFP. The Supplier shall bear the cost for the sample(s) provided.*
- 2.6 Sample Submission for Testing Purposes:** During the evaluation period, the bidding entity may be requested to provide samples of the proposed product/service for thorough testing and assessment by the evaluating team, which should be provided in the agreed timing (but no longer than 20 calendar days). The purpose of this requirement is to ensure that the offered solution meets the stated requirements and standards outlined in this RFP. The Supplier shall bear the cost for the sample(s) provided.
- 2.7** The Bidders shall submit their proposals electronically to: Mr. Hmayak Yezekyan (Hmayak.Yezekyan@ucom.am) and Mr. Armen Mikayelyan (Armen.Mikayelyan@ucom.am), **not later than May 30 of 2025 year, 18:00 (Armenia time), and the letter should be clearly marked RFP No: UC-251995. Later bids will be rejected by the Purchaser.**
- 2.8** Proposals shall remain valid, at a minimum of **45 (forty-five) days** after the deadline date for proposal submission prescribed by the Purchaser. A proposal valid for a shorter period may be rejected by the Purchaser as non-responsive.

- 2.9** For evaluation and comparison purposes, the Purchaser shall convert all proposal prices expressed in various currencies and amounts into a single currency AMD, using the selling exchange rate established by the Central Bank of Armenia on the Proposals opening date.
- 2.10** The Purchaser shall award the Contract to the Bidder whose bid has been determined to be the lowest evaluated bid and is substantially responsive to the bidding documents, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily. Other Contract points will be negotiable between the parties.

This RFP and other related documents (as well as the communication) included are strictly confidential, the "Receiving Party" shall keep confidential and shall not, divulge to any third party any documents, data, or other information. Failure of the Bidder to comply with the request may result in the rejection of its Proposal and further cooperation.

Notwithstanding the above point, the Receiver may furnish Confidential Information of this RFP: (i) to its support service suppliers and their subcontractors and its subcontractor to the extent reasonably required for them to perform their work under their contracts; in which event the Receiving Party shall ensure that the person to whom it furnishes Confidential Information of the Disclosing Party is aware of and abides by the Receiving Party's obligations under this point as if that person were party to the Contract in place of the Receiving Party.

Appendix 1

The required technical specified below (RU):

ТЕХНИЧЕСКОЕ ЗАДАНИЕ

Оборудование системы бесперебойного электроснабжения для нового административного здания на Манандян 33/2 с максимальной мощностью 200кВт

Требования к функциональным, техническим, эксплуатационным характеристикам товара

1. Разработка проекта и интеграции действующего кабельного разводки электропитания в здании Манандян 33/2 на UPS.
2. Количество в блоков мощности каждом UPS должно быть не менее 4 шт. Для обеспечения бесперебойного питания с резервированием N+1 при нагрузке 140кВА.
3. UPS должен иметь 2 CPU с возможностью горячей замены (допускается модулем мощности).
4. Подключение силовых кабелей к UPS должно поддерживаться как сверху, так и снизу.
5. UPS должен иметь время переключения из режима байпас на инвертор и обратно в пределах - 1 мс.
6. UPS должен иметь возможность определять не исправные батарейные модули и сообщать системе мониторинга по сети IP/SNMP LiFePO4 (LFP) или с использованием опционального BMS для Acid Батарей.
7. Батарейные модули должны иметь возможность поштучной горячей замены.
- 8. При батареях Li-Ion**
 - 8.1.1 Поставка свежих Li-Ion батарей должно быть осуществлена после завершения всех монтажных работ UPS платформы. Время начала поставок определяется вендором.
- 8.2 При батареях acid**
 - 8.2.1 Разработка несущей конструкции для рекомендуемых аккумуляторов в рамках предлагаемого помещения.
- 8.3 UPS платформа должна быть оснащена соответствующей системой распределения питания для обеспечения питания во всем здании, где расположена компания Ucom:
- 8.4 Удлинительные кабели, необходимого сечения и вся электромонтажная арматура, и материалы для интеграции электропитания должна быть включена в представленную спецификацию.
- 8.5 UPS должен обеспечивать возможность дистанционного мониторинга и контроля посредством протоколов IP/SNMP.
- 9 UPS должен иметь выходную мощность не менее 200 кВА, с поддержкой коэффициента мощности 1 – 200 кВА/200 кВт.
- 10 UPS должен обеспечить время автономной работы 20 мин, при мощности нагрузки 140 кВт.
- 11 Modular Precision Power Distribution Cabinet должен быть и содержать следующие аксессуары:
 - Input module, supports dual 250 A MDU inputs (no breaker on the module), 10 U high -1pcs
 - Cascading cable for PDC internal subracks- mandatory when the number of output subracks in a PDC is greater than 1-2 pcs
 - The fault tripping alarm components - 2pcs
 - Modular Precision PDC Cabinet dimensions: 600mm(W)*1200mm(D)*2000mm(H),Maximum Support for 400A Input Module – 1pcs
 - Intelligent power monitoring unit,220VAC auxiliary power supply - 4pcs
 - Модули должны быть использованы DPH GEN2 20KW P/N- 3915102002-S
- 12 Все типы монтажных и пусконаладочных работ всей новой системы UPS платформы должны быть включены в спецификацию.
- 13 Компания производитель предлагаемого железа UPS, PDU и других необходимых устройств должны обеспечить интеграцию всех новых установленных узлов в существующем в компании заказчика ПО Data

Center Expert путем обеспечения необходимых ddf файлов (библиотек) для подключения к ПО заказчика. Библиотеки (ddf файлы для ПО Data Center Expert) должны быть включены в спецификацию. ddf файлы для ПО Data Center Expert устанавливаются заказчиком.

- 14 Спецификация должна учитывать все работы, необходимые материалы по кабеллизации как силовой так и информационной с необходимым сопровождением соответствующей маркировки на кабелях по стандартам СКС ANSI/TIA/EIA 942.
- 15 В спецификация должна содержать обучение и сертификацию двух инженеров из компании заказчика для дальнейшей эксплуатации UPS платформы.

Наименование требуемого товара и количества

Источник бесперебойного питания мощностью 200 кВт/200кВА (можно два по 100 кВт с параллельным подключением) в комплекте с аккумуляторными батареями

1. Оборудование системы бесперебойного электроснабжения для административной здании Манандян 33/2, со временем автономной работы не менее 20 минут каждый при нагрузке 140 кВт.
2. Состав одного комплекта:
 - 1.1 Модульный источник бесперебойного питания выходной мощностью 200кВт/200кВА.
ИБП должен обладать модульной конструкцией: силовые модули, модуль байпаса, модуль контроля и управления поддерживают горячую замену.

Входные параметры:

- Номинальное напряжение: 220/380 В, 230/400 В, 240/415 В (3 фазы, 4 провода плюс земля) Диапазон напряжения: 176~276 В пер. тока (при 100% нагрузки)
- Коэффициент нелинейных искажений тока: < 3% (при коэффициенте нелинейных искажений напряжения менее 1%)
- Коэффициент мощности: > 0,99
- Диапазон частоты: 40~70 Гц

Параметры байпаса:

- Номинальное напряжение: 380/400/415В AC
- Частота: 50±3 Гц

Батареи литий-ионные:

- Номинальное напряжение группы: не боле 512В DC (количество батарейных модулей должно быть не боле 16 шт. на батарейный шкаф.)
- Технология литиевых ячеек – LiFePO4 (LFP)
- Данные измерения ячеек АКБ (напряжение группы, величина тока заряда/разряда, напряжение и температура каждой Li-ion ячейки) должны интегрироваться в показания дисплея ИБП.
- Сертификация IEC62619
- Доступ только спереди для установки у стены
- Резервирование: комплекты 1+1
- Основной модуль включает в себя основную BMS для связи с UPS
- Верхний кабельный ввод (питание и сигнал)
- Встроенный защитный выключатель
- Встроенный блок управления аккумуляторной батареей
- Наличие системы управления аккумуляторными батареями
- Срок службы литий-ионных АКБ, не менее: 15 лет
- Вес батарейного шкафа: не более 800 кг
- Размеры батарейного шкафа: не более (ШхГхВ): 600x850x2000мм

Батареи acid:

- Номинальное напряжение группы: не более 512В DC
- Данные измерения ячеек АКБ (напряжение группы, величина тока заряда/разряда, напряжение и температура) должны интегрироваться в показания дисплея ИБП.
- Встроенный защитный выключатель
- Наличие системы управления аккумуляторными батареями (опция)

Выходные параметры:

- Напряжение: 220/380 В, 230/400 В, 240/415 В (3 фазы, 4 провода плюс земля)
- Коэффициент нелинейных искажений напряжения: $\leq 0,5\%$ (при линейной нагрузке)
- Частота: контроль ввода байпаса (режим Online), 50Гц $\pm 0,05\%$ (режим работы от батарей)
- Пределы регулирования напряжения: $\pm 1\%$ (статический режим)
- Частота: 50/60 $\pm 0,05$ Гц
- Перегрузочная способность: при нагрузке $\leq 125\%$: 10 мин, $\leq 150\%$: 1 мин, $> 150\%$: 1 с
- Форма сигнала: Синусоидальная (THDv $<1\%$ для линейной нагрузки)
- Допустимая перегрузка:
 - Инвертор: перегрузка 110% - 10 мин.; перегрузка 150% - 1 мин.; перегрузка 150% и более – 1сек.
 - Байпас: перегрузка 135% в течение длительного периода; перегрузка менее 1000% - 100 мс

Параметры системы:

- Тип UPS: on-line
- Коэффициент мощности инвертора более: 0,98
- КПД в номинальном режиме: 96%
- Ввод кабеля: сверху

Параметры окружающей среды:

- Рабочая температура: 0 до +40°C
- Температура хранения: -40 до +70°C
- Относительная влажность: 0%-95% (без конденсации)
- Высота: 1000 м. Свыше 1000 м, снижение мощности на 1% каждые 100 м
- Уровень шума: <75 дБ

Прочие требования:

- В×Ш×Г (мм): не более 2000×700×1200
- Масса (кг): не более 800
- Сертификация: EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; CB; RoHS, REACH, WEEE, EAC.
- Интерфейс связи: Сухие контакты, RS485, IP SNMP
- Должно быть два батарейный шкафа с литий-ионными модулями
- Номинальное напряжение батарейного шкафа: не более 512В
- Номинальное напряжение батарейного: не более 64В
- Заявленное количество циклов разряда-заряда при 50% разрядах: не менее 5000
- Наличие автоматического выключателя защиты

Какая должна быть функциональность ИБП и АКБ

- Топология ИБП – двойное преобразование
- Архитектура - модульная
- Возможность параллельной работы ИБП
- Цветной сенсорный ЖК дисплей с диагональю от 7 до 12 дюймов, с портами RS485, Fast Ethernet (FE) и USB для ИБП и шкафа с АКБ (для li-ion) должен контролироваться через дисплей ИБП.
- Наличие у ИБП рубильников автоматического выключателя: ручной байпас
- Наличие у ИБП и шкафа с АКБ «Сухих контактов», портов RS485 и IP SNMP (для li-ion)
- Наличие у шкафа с АКБ защиты от превышения температуры, превышения номинального тока, перезарядки или глубокой разрядки АКБ (для li-ion)
- Наличие у модулей с АКБ встроенного поэлементного мониторинга с контролем температуры и напряжения каждой ячейки АКБ (для li-ion)

The required technical specified below (ENG):

TECHNICAL SPECIFICATION

Uninterruptible Power Supply System for the New Administrative Building at Manandian 33/2 with a Maximum Capacity of 200 kVA

Requirements for Functional, Technical, and Operational Characteristics

1. Development of a project and integration of the existing power cable wiring in the building at Manandian 33/2 into the UPS system.
2. Each UPS unit must contain **at least 4 power modules** to ensure uninterrupted power supply with N+1 redundancy under a load of 140 kVA.
3. The UPS must have **2 CPUs with hot-swap capability(allowed by the power module)**.
4. Power cable connections to the UPS must be supported **both from the top and bottom**.
5. The UPS must have a **switching time between bypass and inverter modes (and vice versa) within 1 ms**.
6. The UPS must **detect faulty battery modules** and notify the monitoring system via IP/SNMP LiFePO4 (LFP) or using optional BMS for Acid batteries.
7. Battery modules must support **individual hot-swap replacement**.
8. **For Li-Ion Batteries:**
 - 8.1.1 Fresh Li-Ion batteries must be supplied **after completing all UPS platform installation works**. Delivery timing is determined by the vendor.
9. **For Lead-Acid Batteries:**
 - 8.2.1 Design of a supporting structure for recommended batteries within the proposed room.
10. The UPS platform must include a **power distribution system** to supply power throughout the Ucom company building.

11. **Extension cables** of required cross-sections, electrical mounting hardware, and integration materials must be included in the specification.
12. The UPS must support **remote monitoring and control via IP/SNMP protocols**.
13. The UPS must have an **output power of at least 200 kVA** with a power factor of 1 (200 kVA/200 kW).
14. The UPS must provide **20 minutes of autonomous operation** under a 140 kW load.
15. **Modular Precision Power Distribution Cabinet** must include:
 - Input module supporting dual 250 A MDU inputs (no breaker), 10U height – 1 pc.
 - Cascading cables for internal PDC subracks (mandatory for >1 subrack) – 2 pcs.
 - Fault tripping alarm components – 2 pcs.
 - Cabinet dimensions: 600mm(W)×1200mm(D)×2000mm(H), max. 400A input module – 1 pc.
 - Intelligent power monitoring units (220V AC auxiliary) – 4 pcs.
 - DPH GEN2 20 kW modules (P/N: 3915102002-S).
16. **All installation and commissioning works** for the UPS platform must be included in the specification.
17. The UPS/PDU manufacturer must ensure **integration of new components** into the customer's existing **Data Center Expert software** via provided DDF files (libraries). DDF files must be included in the specification.
18. The specification must cover **cabling works** (power and data) with labeling compliant with ANSI/TIA/EIA 942 standards.
19. The specification must include **training and certification** for two customer engineers for UPS platform operation.

Required Equipment and Quantities

- **200 kW/200 kVA UPS** (or two 100 kW units in parallel) with batteries.
- **Autonomous runtime:** ≥20 minutes at 140 kW load.

Configuration per Unit:

1.1 Modular UPS with 200 kW/200 kVA output .

- **Modular design:** Hot-swappable power, bypass, control, and management modules.

Input Parameters:

- Voltage: 220/380 V, 230/400 V, 240/415 V (3-phase, 4-wire + ground). Range: 176–276 V AC (at 100% load).
- Current THD: <3% (voltage THD <1%).
- Power factor: >0.99.

- Frequency range: 40–70 Hz.

Bypass Parameters:

- Voltage: 380/400/415 V AC.
- Frequency: 50±+/-3 Hz.

UPS Battery types support:

- **Li-Ion Batteries:**
- Nominal voltage: ≤512 V DC (max. 16 modules per cabinet).
- Cell technology: LiFePO4 (LFP).
- Integrated cell monitoring (voltage, current, temperature per cell) via UPS display.
- IEC62619 certification. Front access, 1+1 redundancy.
- Integrated BMS, top cable entry, circuit breaker, battery management.
- Lifespan: ≥15 years.
- Cabinet dimensions: ≤600×850×2000 mm. Weight: ≤800 kg.

Lead-Acid Batteries:

- Nominal voltage: ≤512 V DC.
- Integrated monitoring (voltage, current, and temperature).
- BMS, circuit breaker, and management system.

Output Parameters:

- Voltage: 220/380 V, 230/400 V, 240/415 V (3-phase, 4-wire + ground).
- Voltage THD: ≤0.5% (linear load).
- Frequency: 50 Hz ±0.05% (battery mode).
- Overload capacity:
 - Inverter: 110% for 10 min; 150% for 1 min; >150% for 1 sec.
 - Bypass: 135% continuous; <1000% for 100 ms.

System Parameters:

- UPS type: Online double conversion.
- Inverter power factor: >0.98.
- Efficiency: 96%.
- Top cable entry.

Environmental Conditions:

- Operating temperature: 0–40°C.
- Storage temperature: -40–70°C.
- Humidity: 0–95% (non-condensing).
- Altitude derating: 1% per 100 m above 1000 m.
- Noise: <75 dB.

Physical Specifications:

- Dimensions (H×W×D): ≤2000×700×1200 mm.
- Weight: ≤800 kg.
- Certifications: EN/IEC 62040-1/2/3, CE, CB, RoHS, REACH, WEEE, EAC.
- Interfaces: Dry contacts, RS485, IP/SNMP.
- **Two Li-Ion battery cabinets** (nominal voltage ≤512 V DC, ≤64 V per battery).
- Cycle life: ≥5000 cycles at 50% discharge.
- Integrated circuit breakers.

Functional Requirements for UPS and Batteries:

- **Double-conversion topology.**
- Architecture - modular
- Parallel operation capability.
- **7–12" color touchscreen** with RS485, Ethernet, USB ports.
- Manual bypass switch.
- Dry contacts, RS485, and IP/SNMP for UPS and battery cabinets cabinet with battery (for Li-ion) must be controlled via the UPS display.
- Battery cabinet protections circuit breaker: Over-temperature, over-current, over/under-voltage.
- Per-cell monitoring for battery modules (voltage and temperature) (for Li-ion).

Appendix 2



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Price Proposal

Date of this Proposal submission: *[insert date]*

RFP No.: **UC- 251995**

To: Ucom CJSC

(a) **Price:** The total price of our Proposal, excluding any discounts offered in item (f) below is:

Total price is: *[insert the total price of the Proposal in words and figures, indicating the various amounts and the respective currencies];*

(b) **Validity:** Your Proposal **shall be valid 45 days**, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

(c) **Purchaser Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Proposal, the Most Advantageous Proposal or any other Proposal that you may receive.

Name of the Bidder: **[insert complete name of the Bidder]*

Name of the person duly authorized to sign the Proposal on behalf of the Bidder: **[insert complete name of person duly authorized to sign the Proposal]*

Title of the person signing the Proposal: *[insert complete title of the person signing the Proposal]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing]* **day of** *[insert month]*, *[insert year]*

*: Person signing the Proposal shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Price Proposal.

Please note that this document should be completed separately for each potential type outlined in the technical requirements.



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Appendix 3

Manufacturer's Authorization

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid]

Date: *[insert date (as day, month and year) of Bid Submission]*

RFQ No: UC – 251995

To: Ucom CJSC

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, *(insert the type outlined in the technical requirements)*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with RFP requirements, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Please note that this document should be completed separately for each potential type outlined in the technical requirements.

End of RFP