

## Amendment № 1

### To Request For Quotation

Date:	September 10, 2020
Regarding:	RFQ/066/20 – INSTALLATION OF SENSORS FOR MONITORING OF WATER RESOURCES IN THE FRAMEWORK OF THE "SMART WATER" SYSTEM OF MWR OF THE REPUBLIC OF UZBEKISTAN»

This Amendment is submitted to RFQ/066/20 announced on August 31, 2020 for installation of sensors for monitoring of water resources in the framework of the "smart water" system of MWR of the Republic of Uzbekistan.

- The following composition of the device in "Annex 1" of the Technical Specifications should be read in the following edition:

#### Composition of the device

#	Description	Features	O-ty for 1 unit	Total
<b>Electronic part of the device</b>				
<b>1</b>	<b>Processor, Atmega1280 type or equivalent/analogue</b>		1	50
1.1	Memory at least	128K		
1.2	EEPROM (Electrically Erasable programmable Read-Only Memory)	4K		
1.3	SRAM (static random access memory)	8K		
1.4	Frequency	8MHZ		
1.5	Power	2.7V - 5.5V		
1.6	Case TQFP-100 type			
<b>2</b>	<b>Hard disc AT24CM01 type or equivalent/analogue</b>		1	50
2.1	Memory	1Mb		
2.2	Protocol	I2C		
2.3	Power	1.7V - 5.5V		
2.4	Case SOIC 8-150 mill type			
<b>3</b>	<b>GSM module SIM800L type or equivalent/analogue</b>		1	50
3.1	Frequency	GSM850, EGSM900		
3.2	Capacity	Class 4(2W)		

3.3	Power	3.4V - 4.4V		
<b>4</b>	<b>RS485 Driver</b> MAX485 type <b>or equivalent/analogue</b>		1	50
4.1	Frequency	2.5Mbps		
4.2	power	4.75V - 5.25V		
4.3	Case SOIC 8 -150mill			
<b>5</b>	<b>RTC (Real-Time Clock)</b> PCF2123TS type <b>or equivalent/analogue</b>		1	50
5.1	Protocol	I2C		
5.2	Power	1.6V - 5.5V		
5.3	Case TSSOP-14 type			
<b>6</b>	<b>Level convertor</b> SGM4553YN8G type <b>or equivalent/analogue</b>		7	350
6.1	Case SOT 23-8 type			
6.2	Power	1.3V-5.5V		
<b>7</b>	<b>Boost convertor</b> FP6296XR type <b>or equivalent/analogue</b>		2	100
7.1	Minimum input Power	2.7V		
7.2	Maximum output Kuchlanishi	12V		
7.3	Maximum output current strength	10A		
7.4	Frequency	400Khz		
7.5	Case SOP 8_EP_150mill			
<b>8</b>	<b>Tarnsistor</b> IRF7314 type <b>or equivalent/analogue</b>		2	100
8.1	Power (MAX)	20V		
8.2	Maximum output current strength	5.3A		
8.3	Internal resistance	58mOhm		
8.4	Case SOIC 8_150mill type			
<b>9</b>	<b>Buck convertor</b> LM2576S-ADJ type <b>or equivalent/analogue</b>		1	50
9.1	Minimum input Power	8V		
9.2	Maximum output Power	48V		
9.3	Maximum output current strength	3A		
9.4	Frequency	52Khz		
9.5	Case TO-220 (5) type			
<b>10</b>	<b>Buzzer</b> GSC1625YB type <b>or equivalent/analogue</b>		1	50
10.1	Sound power	80dB		
10.2	Power	3V- 25V		
10.3	Case SMD 16 X 16 X2.5mm type			
<b>11</b>	<b>Ultrasonic Sensor</b> uy-us42 type <b>or equivalent/analogue</b>		1	50
11.1	Power	5V		
11.2	Protocol	I2C		
11.3	Measurement distance	20-800 sm		
<b>12</b>	<b>3G antenna or equivalent/analogue</b>		1	50
12.1	Length	127mm		
12.2	Operating frequency	800-1800Mhz		
<b>13</b>	<b>Bluetooth module</b> HC-05 type <b>or equivalent/analogue</b>		1	50
13.1	Power	4V		
13.2	Protocol: universal asynchronous receiver-transmitter UART RS-232			
13.3	Bluetooth module	5,0		

<b>14</b>	<b>Rechargeable battery type</b> GP2700 rechargeable 2700 AAHC 1,2v 2600mAh (service duration not less than 12 months) <b>or equivalent/analogue</b>	12	600
<b>Supporting devices</b>			
1	The body of the device - a special shield made of stainless steel (20x20x25)	1	50
2	Pyte D32, m	5	250
3	Stem and clutch D32, ps.	3	150
4	Bolt&nut D12, шт.	4	200

2. The following Table 1 in "Annex 2" of Form For Submitting Supplier's Quotation should be read in the following edition:

#	Description	Q-ty	Price for 1 set	Price for 50 sets
<b>Electronic part of the device (50 sets)</b>				
<b>1</b>	<b>Processor</b> , Atmega1280 type, memory at least 128K, EEPROM c 4K, SRAM with 8K, 8MHZ, voltage 2.7V - 5.5V, case type TQFP-100 <b>or equivalent/analogue</b>	50		
<b>2</b>	<b>Hard disc</b> AT24CM01 type, 1 MB, I2C, 1.7V - 5.5V, Case SOIC 8-150 mill type <b>or equivalent/analogue</b>	50		
<b>3</b>	<b>GSM module</b> SIM800L type/GSM850, EGSM900/Class 4(2W)/3.4V - 4.4V <b>or equivalent/analogue</b>	50		
<b>4</b>	<b>RS485 Driver</b> MAX485 type/2.5Mbps/4.75V - 5.25V <b>or equivalent/analogue</b>	50		
<b>6</b>	<b>Level convertor</b> SGM4553YN8G type/1.3V-5.5V/Case SOT 23-8 type <b>or equivalent/analogue</b>	350		
<b>7</b>	<b>Boost convertor</b> FP6296XR type/2,7-12 V/10A/400KHz <b>or equivalent/analogue</b>	100		
<b>8</b>	<b>Tarnsistor</b> IRF7314 type/20V/5,3 A/58mOhm <b>or equivalent/analogue</b>	100		
<b>9</b>	<b>Buck convertor</b> LM2576S-ADJ type/8 - 48V/3A/52KHz <b>or equivalent/analogue</b>	50		
<b>10</b>	<b>Buzzer</b> GSC1625YB type/80dB/3V- 25V/Case SMD 16 X 16 X2.5mm type <b>or equivalent/analogue</b>	50		
<b>11</b>	<b>Ultrasonic Sensor</b> uy-us42 type/5V/I2C Protocol/20-800 sm measurement distance <b>or equivalent/analogue</b>	50		
<b>12</b>	<b>3G antenna/127mm/800-1800Mhz or equivalent/analogue</b>	50		
<b>13</b>	<b>Bluetooth module</b> HC-05 type 4V UART RS-232 <b>or equivalent/analogue</b>	50		
<b>14</b>	<b>Rechargeable battery type</b> GP2700 rechargeable 2700 AAHC 1,2v 2600mAh <b>or equivalent/analogue</b>	600		
<b>Supporting devices</b>				
<b>1</b>	The body of the device - a special shield made of stainless steel (20x20x25)	50		
<b>2</b>	Pyte D32, m	250		
<b>3</b>	Stem and clutch D32, ps.	150		

4	Bolt&nut D12, шт.	200		
Installing of monitoring system sensors				
1	Installation of sensors with adjustment of information transmission for the intended addresses (addresses of installation points are given above), pcs.			
2	Other expenses			
Total price:				
VAT 15% (for companies registered in Uzbekistan as VAT payers)				
Total price including VAT 15%(for companies registered in Uzbekistan as VAT payers):				

Dear Bidders,

You are kindly asked to fill Annex 1 to Amendment No.1 as a Bid Submission Form herewith attached as Annex 1 to Amendment No.1 and submit it to [bids.uz@undp.org](mailto:bids.uz@undp.org).

All Amendments to the RFQ/066/20 are an integral part of it, and all participants must comply with the requirements stipulated by such additions. Any deviation from the claims made by amendments to this RFQ may result in consideration of the proposal as not meeting the requirements and withdrawing from further evaluation.

All other terms and conditions of the RFQ/066/20 remain unchanged.