

REPUBLIC OF THE PHILIPPINES

NATIONAL IRRIGATION ADMINISTRATION

REGIONAL OFFICE NO. IX (ZAMBOANGA PENINSULA) REGIONAL CENTER, BALINTAWAK, PAGADIAN CITY

BIDS AND AWARDS COMMITTEE

ADDENDUM NO. 01

August 29, 2023

This **Addendum No. 01** is issued to modify or amend items in the PhilGEPS Posting for the **Supply, Delivery and Installation of Equipment Machinery, Tools & Accessories, including Operations & Maintenance Training and applicable Certifications, Balintawak, Pagadian City with Contract No.: NIAREG9-090623-COBCY2023-077 (GOODS)**.

This shall form an integral part of the Bid Documents.

Section I. Invitation to Bid

Section III. Bid Data Sheet - ITB Clause 15 & 19.3

Section VI. Schedule of Requirements

Section VII. Technical Specifications

The following information shall be noted:

From:

Section I. Invitation to Bid

- 1. The *National Irrigation Administration Regional Office IX*, through the *COB CY 2023* intends to apply the sum of *Php 6,800,000.00* being the ABC to payments under the contract for *NIAREG9-090623-COBCY2023-077 (GOODS)*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
- 5. A complete set of Bidding Documents may be acquired by interested Bidders on August 18 September 6, 2023 before 9:00 AM from the given address and website(s) below National Irrigation Administration Regional Office IX, Lot 2, Block 15, Regional Center, Balintawak, Pagadian City, Zambo. Sur https://notices.philgeps.gov.ph, https://region9.nia.gov.ph/?q=content/invitation-bid and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Php 10,000. The Procuring Entity shall allow the bidder to present its proof of payment for the fees will be presented in person, by facsimile, or through electronic means.

♣ Section III. Bid Data Sheet - ITB Clause 15 & 19.3

ITB Clause				
15	Three (3) s	ets of Technical & Financial Documents.		
19.3	Total ABC	= Php 6,800,000.00		
	Item No.	Description	Quantity	Unit
	1	Supply and Delivery of Geo-Resistivity Meter & accessories, Including Operation and Maintenance Training	1	set
	2	Supply, Delivery, and Installation of Equipment Machinery, Tools & Accessories, Including Operation & Maintenance Training and applicable Certifications	1	unit
		4 Post Hydraulic Car Lifter Automatic arm restraints. Electric override. Auto safety shut off (TM4P) 4 post hydraulic life possesses a triple protective device of hydraulic control, electrical control and mechanical control. Lift Capacity of 4 tons	1	unit
		2 Post Hydraulic Car Lifter Electric override. Auto safety shut off Lift Capacity of 4 tons	1	unit
		3D Wheel Alignment Machine	1	unit
		Truck and Cars OBD Scanner w/ delivery and demonstration charge	1	unit
		Hydraulic Hose Crimping Machine with consumables (hose, fittings) of different sizes	1	set
		Mechanical Torque Wrench (1/4 drive, 3/8 drive, 1/2 drive and 3/4 drive)	1	set
		22" Tire Changer	1	unit
		Wheel Balancer	1	unit
		8 Drawer Caddy with Tools	1	unit
		Air Operated Grease Pump	1	unit
		Oil Pump	1	unit
		Engine Crane Hoist 2 tons	1	unit
	<u> </u>	Engine Rack	1	unit
		Jack Stand 3 Ton	<u>4</u> 1	pc
		Crocodile Jack 5, 10 Tons (Long) Vertical Hydraulic Jack 5 Tons	2	unit
		Transmission Jack	1	pc unit
		Transmission Rack	1	рс
		Mechanic Chair	1	unit
		Mechanic Dolly	1	unit
		1/2" Air Impact Wrench	1	set
		Waste Oil Drainer	1	set
		Battery Charger 12V/24V	2	рс
		3 HP Electric Air Compressor (Heavy Duty)	1	unit
		Nitrogen Tire Inflator	1	set

Chains Block 5 Tons	1	unit	
Portable Welding Machine	2	unit	
Electric Hand drill including complete sizes of steel drill bits	2	set	
Bench Grinder (Heavy Duty)	1	рс	
Water High Pressure Washer (Including hose)	3	unit	
3/4 Drive Socket 6 Point (19 mm - 53 mm)	1	set	
Heavy duty demolition Jack Hammer	1	set	
Car Jump Starter (12v & 24v)	5	set	

♣ Section VI. Schedule of Requirements

Item No.	Description	Quantity	Unit	Total	Delivered, Weeks/ Months
1	Supply and Delivery of Geo- Resistivity Meter & accessories, Including Operation and Maintenance Training	1	set	1	120 CD
2	Supply, Delivery, and Installation of Equipment Machinery, Tools & Including Operation & Maintenance Training and applicable Certifications	1	unit	1	120 CD
	4 Post Hydraulic Car Lifter Automatic arm restraints. Electric override. Auto safety shut off (TM4P) 4 post hydraulic life possesses a triple protective device of hydraulic control, electrical control and mechanical control. Lift Capacity of 4 tons	1	unit	1	120 CD
	2 Post Hydraulic Car Lifter Electric override. Auto safety shut off Lift Capacity of 4 tons	1	unit	1	120 CD
	3D Wheel Alignment Machine	1	unit	1	120 CD
	Truck and Cars OBD Scanner w/ delivery and demonstration charge	1	unit	1	120 CD
	Hydraulic Hose Crimping Machine with consumables (hose, fittings) of different sizes	1	set	1	120 CD
	Mechanical Torque Wrench (1/4 drive, 3/8 drive, 1/2 drive and 3/4 drive)	1	set	1	120 CD
	22" Tire Changer	1	unit	1	120 CD
	Wheel Balancer	1	unit	1	120 CD
	8 Drawer Caddy with Tools	1	unit	1	120 CD
	Air Operated Grease Pump	1	unit	1	120 CD

Oil Pump	1	unit	1	120 CD
Engine Crane Hoist 2 tons	1	unit	1	120 CD
Engine Rack	1	unit	1	120 CD
Jack Stand 3 Ton	4	рс	4	120 CD
Crocodile Jack 5, 10 Tons (Long)	1	unit	1	120 CD
Vertical Hydraulic Jack 5 Tons	2	рс	2	120 CD
Transmission Jack	1	unit	1	120 CD
Transmission Rack	1	рс	1	120 CD
Mechanic Chair	1	unit	1	120 CD
Mechanic Dolly	1	unit	1	120 CD
1/2" Air Impact Wrench	1	set	1	120 CD
Waste Oil Drainer	1	set	1	120 CD
Battery Charger 12V/24V	2	рс	2	120 CD
3 HP Electric Air Compressor (Heavy Duty)	1	unit	1	120 CD
Nitrogen Tire Inflator	1	set	1	120 CD
Chains Block 5 Tons	1	unit	1	120 CD
Portable Welding Machine	2	unit	2	120 CD
Electric Hand drill including complete sizes of steel drill bits	2	set	2	120 CD
Bench Grinder (Heavy Duty)	1	рс	1	120 CD
Water High Pressure Washer (Including hose)	3	unit	3	120 CD
3/4 Drive Socket 6 Point (19 mm - 53 mm)	1	set	1	120 CD
Heavy duty demolition Jack Hammer	1	set	1	120 CD
Car Jump Starter (12v & 24v)	5	set	5	120 CD

4 Section VII. Technical Specifications

Item	Specification	Statement of Compliance
1	Supply and Delivery of Geo- Resistivity Meter & accessories, Including Operation and Maintenance Training	
A. General	-	
Casing	Shock-resistant, weatherproof case	Rugged Aluminum case meets IEC IP66
Computer	Embedded ARM 9, 400MHz	Embedded ARM 9, 400MHz
GPS	Built-in or External GPS with support for GLONASS and/or with other GNSS	Built-in GPS with support for GLONASS
Display	8.4" Active T FT LCD, full color, daylight visible	8.4" Active TFT LCD, full color daylight visible
I/O Ports	2x KPT 32 pin for imaging AUX Interconnect, USB A, RJ45 for LAN	2x KPT 32 pin for imaging, Aux for accessories. Interconnect, USB A, RJ45 for LAN, Micro SD card slot
WLAN	Built-in antenna or External Wifi Option	IEEE 802.11 b/g/n, built-in antenna
3G/GSM	3G (UMTS/HSPA+) and GSM (GPRS/Edge), built-in antenna Five bands 3G: 850/800, 900, 1900 and 2100 MHz Quad-band GSM:850 900 1800 1900 MHz	3G (UMTS/HSPA+) and GSM (GPRS/Edge), built-in antenna Five bands 3G: 850/800, 900, 1900 and 2100 MHz Quad-band GSM:850 900 1800 1900 MHz
Measure modes	Resistivity, SP, Resistivity and IP using 50% and 100 % duty cycle defending on model configuration	Resistivity, SP, Resistivity and IP using 50% duty cycle. 100% duty cycle IP is possible with the upgrade.

Service Point	Accessible through Internet	Accessible through Internet
Memory capacity	16 GB, micro-SD card accessible from	16 GB, micro-SD card accessible from
Memory capacity	outside	outside
Power	12 V, 8 Ah internal battery, built-in	12 V, 8 Ah internal battery, built-in
1 OWC1	charger	charger
	12-18 VDC external power	12 Volt DC external power
Dimensions	39x21x32cm (WxLxH)	COMPLY – 39x21x32cm (WxLxH)
Weight	13.9 kg, 12.2 kg without internal battery	13.9 kg, 12.2 kg without internal battery
Ambient	-20 °C to + 70 °C operating, non-	-20 °C to + 70 °C operating, non-
temperature	condensing	condensing
range	-30 °C to + 80 °C storage	-30 °C to + 80 °C storage
B. Multi Electrodes		30 d to 1 00 d storage
Number of	Up to 81, using internal electrode	48 electrodes, and upgradeable to 81
Electrodes	selector U to 16384, using external	electrodes system using external
Liceti odes	electrode selectors	electrode selectors, up to 16,384 using
	ciecti dae selectors	external electrode selectors
Switching Matrix	Internal 10x64, divided into four blocks	Internal 10x64, divided into four blocks
	for effective use of all receiver channels	for effective use of all receiver channels
	available	available
Roll-along	Full coverage, both 2D and 3D	full coverage, both 2D and 3D
Pre-installed array	Multiple Gradient, Dipole-Dipole,	Multiple Gradient, Dipole-Dipole,
types	Wenner, Schlumberger, Pole-Dipole and	Wenner, Schlumberger, Pole-Dipole and
	Pole-Pole	Pole-Pole
Remote	2 remote electrodes in addition to inline	2 remote electrodes in addition to inline
Electrodes	electrodes	electrodes
Electrode Test	Estimates contact resistance on all	Estimates contact resistance on all
	electrodes currently in use	electrodes currently in use
C. Receiver		
Number of	Up to 12 (+ 2 for transmitter	2 channels (+2 for transmitter
Channels	monitoring)	monitoring) can be upgraded in the
_		future to 12 channels via internet.
Isolation	All channels are galvanically separated	All channels are galvanically separated
Input Voltage	Up to ± 600 V	400 V
Range	7, 1, 1, 1	45 77
Range	Depending on model	± 15 V, can be upgraded to different
Y . Y . 1	± 2.5 v, ± 15 v, ± 600 v	range $30M\Omega$
Input Impedance	200 MOhm 2.5 V range), 30 MOhm	1 3(1M()
		3014122
Description	MOhm ± 600 V ran e	
Precision	MOhm ± 600 V ran e 0.1 %	0.1%
Accuracy	MOhm ± 600 V ran e	
Accuracy D. Transmitter	M0hm ± 600 V ran e 0.1 % 0.2 %	0.1% 0.2%
Accuracy D. Transmitter Maximum Output	MOhm ± 600 V ran e 0.1 %	0.1%
Accuracy D. Transmitter Maximum Output Power	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W	0.1% 0.2% 100 W
Accuracy D. Transmitter Maximum Output Power Current	M0hm ± 600 V ran e 0.1 % 0.2 %	0.1% 0.2%
Accuracy D. Transmitter Maximum Output Power Current Transmission	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W Constant current transmitter	0.1% 0.2% 100 W Constant current transmitter
Accuracy D. Transmitter Maximum Output Power Current Transmission Maximum Output	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W	0.1% 0.2% 100 W
Accuracy D. Transmitter Maximum Output Power Current Transmission Maximum Output Current	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W Constant current transmitter Up to 2500 mA	0.1% 0.2% 100 W Constant current transmitter 1000 mA
Accuracy D. Transmitter Maximum Output Power Current Transmission Maximum Output Current Maximum Output	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W Constant current transmitter	0.1% 0.2% 100 W Constant current transmitter
Accuracy D. Transmitter Maximum Output Power Current Transmission Maximum Output Current Maximum Output Volta e	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W Constant current transmitter Up to 2500 mA Up to ± 600 V, 1200 V peak to peak	0.1% 0.2% 100 W Constant current transmitter 1000 mA ± 400 V, 800 V peak to peak
Accuracy D. Transmitter Maximum Output Power Current Transmission Maximum Output Current Maximum Output Volta e Current Accuracy	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W Constant current transmitter Up to 2500 mA Up to ± 600 V, 1200 V peak to peak 0.2 %	0.1% 0.2% 100 W Constant current transmitter 1000 mA ± 400 V, 800 V peak to peak 0.2%
Accuracy D. Transmitter Maximum Output Power Current Transmission Maximum Output Current Maximum Output Volta e Current Accuracy Current Precision	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W Constant current transmitter Up to 2500 mA Up to ± 600 V, 1200 V peak to peak 0.2 % 0.1 %	0.1% 0.2% 100 W Constant current transmitter 1000 mA ± 400 V, 800 V peak to peak
Accuracy D. Transmitter Maximum Output Power Current Transmission Maximum Output Current Maximum Output Volta e Current Accuracy Current Precision Instant polarity	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W Constant current transmitter Up to 2500 mA Up to ± 600 V, 1200 V peak to peak 0.2 %	0.1% 0.2% 100 W Constant current transmitter 1000 mA ± 400 V, 800 V peak to peak 0.2%
Accuracy D. Transmitter Maximum Output Power Current Transmission Maximum Output Current Maximum Output Volta e Current Accuracy Current Precision Instant polarity changer	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W Constant current transmitter Up to 2500 mA Up to ± 600 V, 1200 V peak to peak 0.2 % 0.1 % Yes	0.1% 0.2% 100 W Constant current transmitter 1000 mA ± 400 V, 800 V peak to peak 0.2% 0.1%
Accuracy D. Transmitter Maximum Output Power Current Transmission Maximum Output Current Maximum Output Volta e Current Accuracy Current Precision Instant polarity	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W Constant current transmitter Up to 2500 mA Up to ± 600 V, 1200 V peak to peak 0.2 % 0.1 % Yes Monitoring of temperature and power	0.1% 0.2% 100 W Constant current transmitter 1000 mA ± 400 V, 800 V peak to peak 0.2% 0.1% Monitoring of temperature and power
Accuracy D. Transmitter Maximum Output Power Current Transmission Maximum Output Current Maximum Output Volta e Current Accuracy Current Precision Instant polarity changer	MOhm ± 600 V ran e 0.1 % 0.2 % Up to 250 W Constant current transmitter Up to 2500 mA Up to ± 600 V, 1200 V peak to peak 0.2 % 0.1 % Yes	0.1% 0.2% 100 W Constant current transmitter 1000 mA ± 400 V, 800 V peak to peak 0.2% 0.1%

F. Accessories	With heavy duty umbrella with	With heavy duty umbrella with
11110005501105	anchor/stand, portable, foldable, and	anchor/stand, foldable, and lightweight
	lightweight chair	chair
	6 pcs two-way radio	6 pieces two-way radio
	1 pc External car battery charger	1 pc external car battery charger
	1 pc 12V external heavy duty car battery	1-piece 12VDC external heavy duty car
		battery
	4 pcs hammer	4 pieces hammer
G. Software,	With Free licensed software for 2D	With free licensed Res2DIny inversion
Warranty &	processing	software for 2D processing
Trainings	processing	software for 2D processing
	With I-year warranty against inherent	with 1 year warranty against inherent
	factory defects	factory defects
	With equipment and software training	With extensive field and data processing
	and technical support.	training for 3 to 5 days and lifetime technical, software support
	Supply, Delivery, and Installation of	
	Equipment Machinery, Tools &	
2	Accessories, Including Operation &	
	Maintenance Training and applicable	
	Certifications	
	4 Post Hydraulic Car Lifter	
	Automatic arm restraints.	
	Electric override. Auto safety shut off	
	(TM4P) 4 post hydraulic life possesses	
	a triple protective device of hydraulic	
	control, electrical control and	
	mechanical control.	
	Lift Capacity of 4 tons	
	2 Post Hydraulic Car Lifter	
	Electric override. Auto safety shut off	
	Lift Capacity of 4 tons	
	3D Wheel Alignment Machine	
	Truck and Cars OBD Scanner w/	
	delivery and demonstration charge	
	Hydraulic Hose Crimping Machine with	
	consumables (hose, fittings) of different	
	sizes	
	Mechanical Torque Wrench (1/4 drive,	
	3/8 drive, 1/2 drive and 3/4 drive)	
	22" Tire Changer	
	Wheel Balancer	
	8 Drawer Caddy with Tools	
	Air Operated Grease Pump	
	Oil Pump	
	Engine Crane Hoist 2 tons	
	Engine Rack	
	Jack Stand 3 Ton	
	Crocodile Jack 5, 10 Tons (Long)	
	Vertical Hydraulic Jack 5 Tons	
	Transmission Jack	
	Transmission Rack	
	Mechanic Chair	
	Mechanic Dolly	
	1/2" Air Impact Wrench	
	Waste Oil Drainer	
	waste on Drainer	

Battery Charger 12V/24V	
3 HP Electric Air Compressor (Heavy	
Duty)	
Nitrogen Tire Inflator	
Chains Block 5 Tons	
Portable Welding Machine	
Electric Hand drill including complete	
sizes of steel drill bits	
Bench Grinder (Heavy Duty)	
Water High Pressure Washer (Including	
hose)	
3/4 Drive Socket 6 Point (19 mm - 53	
mm)	
Heavy duty demolition Jack Hammer	
Car Jump Starter (12v & 24v)	

To:

♣ Section I. Invitation to Bid

- 1. The National Irrigation Administration Regional Office IX, through the COB CY 2023 intends to apply the sum of Php 6,800,000.00, Lot 1 Php 4,000,000.00 and Lot 2 Php 2,800,000.00 being the ABC to payments under the contract for NIAREG9-090623-COBCY2023-077 (GOODS). Bids received in excess of the ABC shall be automatically rejected at bid opening.
- 5. A complete set of Bidding Documents may be acquired by interested Bidders on August 18 September 6, 2023 before 9:00 AM from the given address and website(s) below National Irrigation Administration Regional Office IX, Lot 2, Block 15, Regional Center, Balintawak, Pagadian City, Zambo. Sur https://notices.philgeps.gov.ph, https://region9.nia.gov.ph/?q=content/invitation-bid and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Php 10,000, Lot 1 Php 5,000.00 and Lot 2 Php 5,000.00. The Procuring Entity shall allow the bidder to present its proof of payment for the fees will be presented in person, by facsimile, or through electronic means.

♣ Section III. Bid Data Sheet - ITB Clause 15 & 19.3

ITB Clause					
15	Thre	ee (3) so	ets of Technical & Financial Documents. (So	oftbound wit	h tabbing
19.3	19.3 Total ABC = Php 6,800,000.00 Lot 1 = Php 4,000,000.00 Lot 2 = Php 2,800,000.00				
	Item No. Description Qu				
			LOT 1		
		1	Supply and Delivery of Geo-Resistivity Meter & accessories, Including Operation and Maintenance Training	1	set
			LOT 2		
		2	Supply, Delivery, and Installation of Equipment Machinery, Tools & Accessories, Including Operation &	1	unit

	Maintenance Training and applicable		
	Certifications		
	4 Post Hydraulic Car Lifter		unit
	Automatic arm restraints.		
	Electric override. Auto safety shut off		
	(TM4P) 4 post hydraulic life possesses a		
	triple protective device of hydraulic	1	
	control, electrical control and mechanical		
	control.		
	Lift Capacity of 4 tons		
	2 Post Hydraulic Car Lifter		unit
	Electric override. Auto safety shut off	1	
	Lift Capacity of 4 tons		
	3D Wheel Alignment Machine	1	unit
	Truck and Cars OBD Scanner w/ delivery	1	
	and demonstration charge	1	unit
	Hydraulic Hose Crimping Machine with		
	consumables (hose, fittings) of different	1	set
	sizes		
	Mechanical Torque Wrench (1/4 drive,	1	ant
	3/8 drive, 1/2 drive and 3/4 drive)	1	set
	22" Tire Changer	1	unit
	Wheel Balancer	1	unit
	8 Drawer Caddy with Tools	1	unit
	Air Operated Grease Pump	1	unit
	Oil Pump	1	unit
	Engine Crane Hoist 2 tons	1	unit
	Engine Rack	1	unit
	Jack Stand 3 Ton	4	рс
	Crocodile Jack 5, 10 Tons (Long)	1	unit
	Vertical Hydraulic Jack 5 Tons	2	рс
	Transmission Jack	1	unit
	Transmission Rack	1	рс
	Mechanic Chair	1	unit
	Mechanic Dolly	1	unit
	1/2" Air Impact Wrench	1	set
	Waste Oil Drainer	1	set
	Battery Charger 12V/24V	2	рс
	3 HP Electric Air Compressor (Heavy Duty)	1	unit
	Nitrogen Tire Inflator	1	set
	Chains Block 5 Tons	1	unit
	Portable Welding Machine	2	unit
	Electric Hand drill including complete		unit
	sizes of steel drill bits	2	set
1	Bench Grinder (Heavy Duty)	1	рс
	Water High Pressure Washer (Including		
	hose)	3	unit
	3/4 Drive Socket 6 Point (19 mm - 53 mm)	1	set
	Heavy duty demolition Jack Hammer	1	set
1	Car Jump Starter (12v & 24v)	5	set
	Sur jump starter (III a III)	J	500

4 Section VI. Schedule of Requirements

Item No.	Description	Quantity	Unit	Total	Delivered, Weeks/
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					Months
	LOT 1				
1	Supply and Delivery of Geo- Resistivity Meter & accessories, Including Operation and Maintenance Training	1	set	1	120 CD
2	Supply, Delivery, and Installation of Equipment Machinery, Tools & Accessories, Including Operation & Maintenance Training and applicable Certifications	1	unit	1	120 CD
	4 Post Hydraulic Car Lifter Automatic arm restraints. Electric override. Auto safety shut off (TM4P) 4 post hydraulic life possesses a triple protective device of hydraulic control, electrical control and mechanical control. Lift Capacity of 4 tons	1	unit	1	120 CD
	2 Post Hydraulic Car Lifter Electric override. Auto safety shut off Lift Capacity of 4 tons	1	unit	1	120 CD
	3D Wheel Alignment Machine	1	unit	1	120 CD
	Truck and Cars OBD Scanner w/ delivery and demonstration charge	1	unit	1	120 CD
	Hydraulic Hose Crimping Machine with consumables (hose, fittings) of different sizes	1	set	1	120 CD
	Mechanical Torque Wrench (1/4 drive, 3/8 drive, 1/2 drive and 3/4 drive)	1	set	1	120 CD
	22" Tire Changer	1	unit	1	120 CD
	Wheel Balancer	1	unit	1	120 CD
	8 Drawer Caddy with Tools	1	unit	1	120 CD
	Air Operated Grease Pump	1	unit	1	120 CD
	Oil Pump	1	unit	1	120 CD
	Engine Crane Hoist 2 tons	1	unit	1	120 CD
	Engine Rack	1	unit	1	120 CD
	Jack Stand 3 Ton	4	pc ··	4	120 CD
	Crocodile Jack 5, 10 Tons (Long)	1	unit	1	120 CD
	Vertical Hydraulic Jack 5 Tons	2	pc	2	120 CD
	Transmission Jack	1	unit	1	120 CD
	Transmission Rack	1 1	pc	1 1	120 CD 120 CD
	Mechanic Chair Mechanic Dolly	1	unit	1	120 CD 120 CD
	1/2" Air Impact Wrench	1	unit set	1	120 CD 120 CD
	Waste Oil Drainer	1	set	1	120 CD
	Battery Charger 12V/24V	2	рс	2	120 CD

3 HP Electric Air Compressor (Heavy Duty)	1	unit	1	120 CD
Nitrogen Tire Inflator	1	set	1	120 CD
Chains Block 5 Tons	1	unit	1	120 CD
Portable Welding Machine	2	unit	2	120 CD
Electric Hand drill including complete sizes of steel drill bits	2	set	2	120 CD
Bench Grinder (Heavy Duty)	1	рс	1	120 CD
Water High Pressure Washer (Including hose)	3	unit	3	120 CD
3/4 Drive Socket 6 Point (19 mm - 53 mm)	1	set	1	120 CD
Heavy duty demolition Jack Hammer	1	set	1	120 CD
Car Jump Starter (12v & 24v)	5	set	5	120 CD

♣ Section VII. Technical Specifications

Item	Specification	Statement of Compliance
LOT 1		
1	Supply and Delivery of Geo- Resistivity Meter & accessories, Including Operation and Maintenance Training	
A. General		
Casing	Shock-resistant, weatherproof case	Rugged Aluminum case meets IEC IP66
Computer	Embedded ARM 9, 400MHz	Embedded ARM 9, 400MHz
GPS	Built-in or External GPS with support for GLONASS and/or with other GNSS	Built-in GPS with support for GLONASS
Display	8.4" Active T FT LCD, full color, daylight visible	8.4" Active TFT LCD, full color daylight visible
I/O Ports	2x KPT 32 pin for imaging AUX Interconnect, USB A, RJ45 for LAN	2x KPT 32 pin for imaging, Aux for accessories. Interconnect, USB A, RJ45 for LAN, Micro SD card slot
WLAN	Built-in antenna or External Wifi Option	IEEE 802.11 b/g/n, built-in antenna
3G/GSM	3G (UMTS/HSPA+) and GSM (GPRS/Edge), built-in antenna Five bands 3G: 850/800, 900, 1900 and 2100 MHz Quad-band GSM:850 900 1800 1900 MHz	3G (UMTS/HSPA+) and GSM (GPRS/Edge), built-in antenna Five bands 3G: 850/800, 900, 1900 and 2100 MHz Quad-band GSM:850 900 1800 1900 MHz
Measure modes	Resistivity, SP, Resistivity and IP using 50% and 100 % duty cycle defending on model configuration	Resistivity, SP, Resistivity and IP using 50% duty cycle. 100% duty cycle IP is possible with the upgrade.
Service Point	Accessible through Internet	Accessible through Internet
Memory capacity	16 GB, micro-SD card accessible from outside	16 GB, micro-SD card accessible from outside
Power	12 V, 8 Ah internal battery, built-in charger 12-18 VDC external power	12 V, 8 Ah internal battery, built-in charger 12 Volt DC external power
Dimensions	39x21x32cm (WxLxH)	COMPLY – 39x21x32cm (WxLxH)
Weight	13.9 kg, 12.2 kg without internal battery	13.9 kg, 12.2 kg without internal battery
Ambient	-20 °C to + 70 °C operating, non-	-20 °C to + 70 °C operating, non-
temperature	condensing	condensing
range	-30 °C to + 80 °C storage	-30 °C to + 80 °C storage
B. Multi Electrode		or a to rear a storage
	o our reg ogotomo	

Number of	Up to 81, using internal electrode	48 electrodes, and upgradeable to 81	
Electrodes	selector U to 16384, using external	electrodes system using external	
Liceti odes	electrode selectors	electrodes system using external electrode selectors, up to 16,384 using	
		external electrode selectors	
Switching Matrix	Internal 10x64, divided into four blocks	Internal 10x64, divided into four blocks	
	for effective use of all receiver channels	for effective use of all receiver channels	
	available	available	
Roll-along	Full coverage, both 2D and 3D	full coverage, both 2D and 3D	
Pre-installed array	Multiple Gradient, Dipole-Dipole,	Multiple Gradient, Dipole-Dipole,	
types	Wenner, Schlumberger, Pole-Dipole and	Wenner, Schlumberger, Pole-Dipole and	
	Pole-Pole	Pole-Pole	
Remote	2 remote electrodes in addition to inline	2 remote electrodes in addition to inline	
Electrodes	electrodes	electrodes	
Electrode Test	Estimates contact resistance on all	Estimates contact resistance on all	
	electrodes currently in use	electrodes currently in use	
C. Receiver	10 (0 1		
Number of	Up to 12 (+ 2 for transmitter	2 channels (+2 for transmitter	
Channels	monitoring)	monitoring) can be upgraded in the	
		future to 12 channels via internet.	
Isolation	All channels are galvanically separated	All channels are galvanically separated	
Input Voltage	Up to ± 600 V	400 V	
Range		17.7	
Range	Depending on model	± 15 V, can be upgraded to different	
	± 2.5 v, ± 15 v, ± 600 v	range	
Input Impedance	200 MOhm 2.5 V range), 30 MOhm	30ΜΩ	
.	M0hm ± 600 V ran e	2.404	
Precision	0.1 %	0.1%	
Accuracy	0.2 %	0.2%	
D. Transmitter	II t- 250 M	100 W	
Maximum Output Power	Up to 250 W	100 W	
Current	Constant current transmitter	Constant current transmitter	
Transmission	Constant current transmitter	Constant current transmitter	
Maximum Output	IIn to 2500 mA	1000 mA	
Current	op to 2300 mA	1000 IIIA	
Maximum Output	Up to ± 600 V, 1200 V peak to peak	± 400 V, 800 V peak to peak	
Volta e	op to 1 000 v, 1200 v peak to peak	1 400 V, 600 V peak to peak	
Current Accuracy	0.2 %	0.2%	
Current Precision	0.1 %	0.1%	
Instant polarity	Yes	01270	
changer	1 		
Self-Diagnostics	Monitoring of temperature and power	Monitoring of temperature and power	
	dissipation	dissipation	
E. Safe	Easily accessible safe switch	Easily accessible safety switch	
F. Accessories	With heavy duty umbrella with	With heavy duty umbrella with	
	anchor/stand, portable, foldable, and	anchor/stand, foldable, and lightweight	
	lightweight chair	chair	
	6 pcs two-way radio	6 pieces two-way radio	
	1 pc External car battery charger	1 pc external car battery charger	
	1 pc 12V external heavy duty car battery	1-piece 12VDC external heavy duty car	
		battery	
	4 pcs hammer	4 pieces hammer	
G. Software,	With Free licensed software for 2D	With free licensed Res2DInv inversion	
Warranty &	processing	software for 2D processing	
Trainings		1	

	With I-year warranty against inherent factory defects	with 1 year warranty against inherent factory defects
	With equipment and software training and technical support.	With extensive field and data processing training for 3 to 5 days and lifetime
		technical, software support
LOT 2		
	Supply, Delivery, and Installation of	
	Equipment Machinery, Tools &	
2	Accessories, Including Operation &	
	Maintenance Training and applicable	
	Certifications	
	4 Post Hydraulic Car Lifter	
	Automatic arm restraints.	
	Electric override. Auto safety shut off	
	(TM4P) 4 post hydraulic life possesses	
	a triple protective device of hydraulic	
	control, electrical control and	
	mechanical control.	
	Lift Capacity of 4 tons	
	2 Post Hydraulic Car Lifter	
	Electric override. Auto safety shut off	
	Lift Capacity of 4 tons	
	3D Wheel Alignment Machine	
	Truck and Cars OBD Scanner w/	
	delivery and demonstration charge	
	Hydraulic Hose Crimping Machine with	
	consumables (hose, fittings) of different	
	sizes	
	Mechanical Torque Wrench (1/4 drive, 3/8 drive, 1/2 drive and 3/4 drive)	
	22" Tire Changer	
	Wheel Balancer	
	8 Drawer Caddy with Tools	
	Air Operated Grease Pump	
	Oil Pump	
	Engine Crane Hoist 2 tons	
	Engine Rack	
	Jack Stand 3 Ton	
	Crocodile Jack 5, 10 Tons (Long)	
	Vertical Hydraulic Jack 5 Tons	
	Transmission Jack	
	Transmission Jack Transmission Rack	
	Mechanic Chair	
	Mechanic Dolly	
	1/2" Air Impact Wrench	
	Waste Oil Drainer	
	Battery Charger 12V/24V	
	3 HP Electric Air Compressor (Heavy Duty)	
	Nitrogen Tire Inflator	
	Chains Block 5 Tons	
	Portable Welding Machine	
	Electric Hand drill including complete	
	sizes of steel drill bits	
	Bench Grinder (Heavy Duty)	

Water High Pressure Washer (Including hose)	
3/4 Drive Socket 6 Point (19 mm - 53 mm)	
Heavy duty demolition Jack Hammer	
Car Jump Starter (12v & 24v)	

For the guidance and information of all concerned.

BAC Charperson
Received by the Bidder
Date: