REQUEST FOR QUOTATION (RFQ)

To	: Eligible Service Providers
Project :	Radio Ndarason Internationale Radio Equipment Specifications for Difa and Mora
Title of work	: Supply of Radio Equipment
Ref. No.	: RFQ – ONF—202311-02
Date	: 20th November 2023
Closing Date:	8th December 2023

Radio Ndarasion Internation Radio Equipment Specifications for Diffa and Mora

Okapi Consulting seeks proposals from qualified service providers to deliver to the Ndjamena RNI offices Radio Equipment for Diffa and Mora for Radio Ndarason Internationale (RNI) into the Lake Chad region. As a critical information source for millions of listeners in the region, RNI has earned its reputation through the unwavering quality, reliability, and integrity of its broadcasts.

Radio Ndarason Internationale plays a pivotal role in promoting peace and stability in the Lake Chad region, aligning with the African Union's mandate. RNI's programming, broadcast in the Kanuri, Kanembu, and Buduma languages, targets areas impacted by the Boko Haram insurgency. With over 7.5 million regular listeners on Shortwave and FM, RNI remains a beacon of hope and a source of vital information for communities in the region.

Okapi Consulting invites comprehensive proposals from experienced service providers to supply Radio Equipment to the Ndjamena RNI offices which will be installed by RNI appointed technicians or staff in studios in Diffa and or Mora to facilitate radio transmission services for RNI. Interested suppliers are requested to submit detailed quotes for shortwave and FM services, along with information and/or documented proof as to how the potential supplier adheres and will be able to reach each of the evaluation criteria as well as the other specifications pertained in the Terms of Reference (TOR).

[Click here](#) to access the full Request for Proposal (RFP) with detailed specifications.

Company Registration and Experience: The bidder should be a reputable registered company with at least five years of experience providing similar services.

In addition bidders will be assessed on their ability to achieve the following Key Performance Indicators:

1. **Vendor Requirements:** Vendors are required to provide in their quotations, including payment terms, bank details, contact details, and delivery period.
2. **Pricing Structure:** Quoted prices must be all-inclusive and cover delivery costs
3. **Quotation Contents:** This section outlines the mandatory components of the quotation, including payment terms, delivery terms, delivery period, bank details, and contact details.
4. **Okapi's Rights:** Okapi's reserves the right to accept or reject quotations, cancel the procurement process, and reject all quotations without prior notice or explanation. This reservation of authority safeguards Okapi's interests and ensures that it retains complete control over the procurement process.
5. **Timely delivery of materials:** The bidder must be able to deliver the materials/services on or before the specified date of January 30, 2023. The bidder must have a proven track record of meeting delivery deadlines for similar projects.
6. **Adherence to quotation validity:** The bidder's quotation must be valid for at least thirty (30) calendar days from the date of quotation. The bidder must be able to honor the prices quoted during the validity period. The bidder should notify Okapi in advance if any changes to the quoted prices are necessary.
7. **Clear payment terms:** The bidder must clearly state the payment terms in the quotation. The bidder should be able to provide flexible payment options if required.
8. Responsiveness to clarification requests: The bidder must be responsive to requests for clarification regarding the project. The bidder should provide prompt and accurate clarifications to ensure project understanding. The bidder should maintain open communication with Okapi throughout the procurement process.
9. For any clarification regarding this Project, please send requests for clarification to tender1@okapi.cc not later 12:00 noon 24th November, 2023.
10. Subject line must include RFQ number and Title
11. Quotations shall be signed, stamped and scanned in colour.
12. All vendors are required to quote, payment terms, bank detail, contact detail, delivery period.
13. Quoted prices must be all inclusive of delivery costs

14. The quotation must include;

Payment terms

a) Delivery terms

b) Delivery period

c) Bank details

d) Contact details

Radio Ndarasion Internation Equipment Specifications for Diffa and Mora		
Qty	Item	Technical Specifications
2	D and R Airmate Broadcast Mixing Console USB 12 (or equivalent)	12 Channels, 10 Mic Inputs, 20 stereo line inputs, 2 USB Ports, 2 Bluetooth Hybrid Channels, Fader Start
1	Additional Bluetooth module for Airmate Mixing Console	This is an optional PC Board to replace the TELCO or VoIP module inside an AIRMATE-USB mixer to be able to use Bluetooth.
2	Roland Octacapture 4 Stereo Output USB Interface (or equivalent)	Inputs: 4 stereo analogue (balanced or unbalanced 1/4" jacks) Outputs: 4 stereo analogue (balanced or unbalanced 1/4" jacks)
3	Desktop PC	Windows 11 Pro, i5 processor, 8GB RAM, 512GB SSD, 4 USB Ports and Wifi Adapter
1	ZaraStudio 3 Playout Software (or equivalent)	Solution for radio automation. Works with any Windows-compatible sound card. Works with or without database. Supports the most common audio formats: MP3, WAV, MP2, OGG, WMA, FLAC, AAC+.
1	Radiocaster Streaming Software (or equivalent)	Support for audio capture from any computer input or playback device. Broadcast in MP3. Works with Icecast 2, Shoutcast v1/v2. Integrated DSP: equalizer, compressor. Includes Broadcasting statistics (current listeners, peak listeners)
1	Radiologger Logging Software (or equivalent)	Scheduler - automatic start/stop of recording in specified hours. Encoding into mp3, ogg or other codec on the fly, without intermediate WAV. Recording directly from playback device input. Records can be split into parts. Low CPU usage.
2	TFT Monitor 22" for Desktop PC	Screen size: 22 Inches. Display resolution maximum: 1920 x 1080. Special feature: Flicker-Free Refresh rate: 75 Connectivity technology: VGA, HDMI Aspect ratio: 16:9
2	Wireless Keyboard, Mouse	Connection: Wireless 2.4 GHz. Up to 2 years battery life. Optical mouse. Scroll wheel.

2	4 Way Headphone Distribution Amplifier	Share a single stereo source with up to four pairs of headphones. Individual level control for each output. Powered via an included 12V adapter.
6	Anglepoise Mic Stand	Thread Size 3/8 or 5/8 (with incld adaptor) Weight (g) 1520 Horizontal Reach (mm) 940 Vertical Reach (mm) 860 Dimensions (mm) 65 W x 940 H x 100 D Minimum Weight Supported (g) 94 Maximum Weight Supported (g) 1200
6	Rode Procaster Microphones (or equivalent)	Acoustic Principle Dynamic Polar Pattern Cardioid Address Type End Frequency Range 75Hz - 18kHz Output Impedance 320Ω Sensitivity -56.0dB re 1 Volt/Pascal (1.60mV @ 94 dB SPL) +/- 2 dB @ 1kHz Output Connection XLR
2	Pair of M-Audio BX5 Monitor Speakers (or equivalent)	Bi-amplified design with 70 watts of distributed power for cohesive, accurate sound 5" low-frequency drivers with Kevlar cones for rich, defined lows 1" high-frequency drivers with natural silk domes and integrated waveguides for smooth, clear highs. Magnetic shielding eliminates interference with other electronic equipment. XLR balanced and 1/4" balanced/unbalanced inputs. Frequency Response: 56Hz-22kHz. Crossover Frequency: 3 kHz. Low-Frequency Amplifier Power: 40 watts. High-Frequency Amplifier Power: 30 watts. Maximum Signal-To-Noise (Dynamic Range): > 100 dB (typical A-weighted). Voltage: 230V ~50/60 Hz
8	Sennheiser HD200 Studio Headphones (or equivalent)	Color black Wearing style Headband Impedance 32 ohms Frequency response 20-20,000 Hz Sound pressure level (SPL) 108 dB Ear coupling Around-Ear (Circumaural) Jack plug 3.5mm (straight) Cable length 2.0 m Load rating 500 mW Acoustics Acoustic principle: "Dynamic, closed" Harmonic distortion <0.1% Weight w/o cable 184 g
3	D and R ON AIR Lights (or equivalent)	Width 260mm, Height: 125mm, Depth: 65mm Cable entry holes and key slot holes in the back. Powered by a 12 volt DC 1 Amp externalpower supply. No relay required.
2	4TB NAS Storage with Enclosure	Connectivity Technology: Ethernet. Data Transfer Rate 0 Gb per second. Hard Disk Size 4 TB. 2 Bay.
2	Barix Instreamer Audio over IP Encoder (or equivalent)	Standalone IP Audio Encoder Device with support for MP3, PCM and VoIP (uLAw/aLaw) audio codecs • Supports IP streaming standards such as TCP/IP, RTP, SIP, Shoutcast, Multicast • Simple bowser based device management, SNMP Monitoring
1	5 Port Wireless Network Router	Network Switch with durable metal casing: 5 Gigabit ethernet ports Plug and play 5 port gigabit switch, no configuration required ethernet switch

3	CAT 5 Network Cable with RJ45 Connectors at Both Ends 5m	Cable Code, Cat 5e. Cable End Type RJ45. Cable Length 5 m. Cable Product Type. Ethernet. Cable Profile Round. Indoor Usage. Manufacturer Guarantee 1 Year Guarantee.
1	Cables and Connectors to connect all of the equipment in the Broadcast Studio	Professional Grade Audio Cables and Connectors. Gold plated connectors where possible.
2	6 Way Surge Protected Power Extension Lead (5m)	5m Length.
2	Radio Controlled Clock with Large Digital Display	Radio Controlled Large LCD Wall clock with Seconds Displayed. Wall mounting or Table standing
1	1KVA APC UPS	Pure sine wave output on battery. Cold-start capable. LCD Status Display. Temperature-compensated battery charging. 8 IEC outlets. 1 KVA Capacity.
STUDIO 2 – Production		
2	D and R Airmate Broadcast Mixing Console USB 12 (or equivalent)	12 Channels, 10 Mic Inputs, 20 stereo line inputs, 2 USB Ports, 2 Bluetooth Hybrid Channels, Fader Start
2	Roland Octacapture 4 Stereo Output USB Interface (or equivalent)	Inputs: 4 stereo analogue (balanced or unbalanced 1/4" jacks) Outputs: 4 stereo analogue (balanced or unbalanced 1/4" jacks)
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1	Radiologger Logging Software (or equivalent)	Scheduler - automatic start/stop of recording in specified hours. Encoding into mp3, ogg or other codec on the fly, without intermediate WAV. Recording directly from playback device input. Records can be split into parts. Low CPU usage.
2	TFT Monitor 22" for Desktop PC	Screen size: 22 Inches. Display resolution maximum: 1920 x 1080. Special feature: Flicker-Free Refresh rate: 75 Connectivity technology: VGA, HDMI Aspect ratio: 16:9

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2	ON AIR Light	Width 260mm, Height: 125mm, Depth: 65mm Cable entry holes and key slot holes in the back. Powered by a 12 volt DC 1 Amp externalpower supply. No relay required.
1	Cables and Connectors to connect all of the equipment in the Broadcast Studio	Professional Grade Audio Cables and Connectors.
2	6 Way Surge Protected Power Extension Lead (5m)	5m Length.
2	Radio Controlled Clock with Large Digital Display	Radio Controlled Large LCD Wall clock with Seconds Displayed. Wall mounting or Table standing

1	1KVA APC UPS (or equivalent)	Pure sine wave output on battery. Cold-start capable. LCD Status Display. Temperature-compensated battery charging. 8 IEC outlets. 1 KVA Capacity.

Reporter Packs and Outside Broadcast

8	Laptop PC and Mouse	Laptop PC with 15" Screen, Windows 11 Pro, i5 Processor, 512GB SSD, 8GB RAM, and Wired Optical USB Mouse
8	Laptop Backpack	Padded notebook compartment. For Laptops up to 15.6" Large front pocket. Made of durable material.
8	Zoom H2n Portable Audio Recorder (or equivalent)	3.5mm Mic Input. Analog-type input gain control Auto Gain provides three preset recording levels Built-in reference speaker for fast monitoring Large 1.8 inch backlit LCD display Supports up to 24-bit/96kHz audio in BWF-compliant WAV or a variety of MP3 formats Internal mixdown: four-track surround to stereo Built-in effects, including compression/limiting and low-cut filtering
8	Accessory Pack for H2N Recorder	Included hot shoe adapter Foam Windscreen AC adapter (USB type) USB cable Adjustable tripod stand Mic clip adapter
8	32GB SD Card	Flash memory type: SD Memory storage capacity: 32 GB.
8	Reporter Microphone	Acoustic Principle Dynamic Polar Pattern Omnidirectional Address Type End Frequency Range 70Hz - 15kHz Output Impedance 150Ω Sensitivity -56.0dB re 1 Volt/Pascal (1.00mV @ 94 dB SPL) +/- 2 dB @ 1kHz Output Connection XLR
8	Mic to Recorder Lead 1.5m	1.5M FEMALE XLR TO BALANCED MINI JACK Cable. Gold plated contacts.
1	Small USB Audio Mixer	4 Mic inputs, 2 Stereo Line inputs. 220 VAC Power Input.
16	Sennheiser HD200 Studio Headphones (or equivalent)	Color black Wearing style Headband Impedance 32 ohms Frequency response 20-20,000 Hz Sound pressure level (SPL) 108 dB Ear coupling Around-Ear (Circumaural) Jack plug 3.5mm (straight) Cable length 2.0 m Load rating 500 mW Acoustics Acoustic principle: "Dynamic, closed" Harmonic distortion <0.1% Weight w/o cable 184 g

Transmission

2	Audio Switch to switch between studios	XLR inputs and outputs

2	RFE 1000 Watt Professional FM Transmitter with RDS, Audio Processor and	RF Output Impedance 50 ohm. RF Output Connector "7/16" DIN. Monitor RF BNC connector. VSWR 1,5:1 WITH AUTOMATIC FOLDBACK. Frequency Range 87.5 ÷ 108.00 MHz. Frequency Stability ±1 ppm from -5 to 45°C. Type of Modulation Analogue. Off Lock Attenuation ≥ -80 dBc. Modulation Capability ±150 KHz. Limiter built in. Power Scheduler Built In. Audio Processor Built In. Power Good Detector adjustable from 20÷90% of the power. Audio Presence Detector adjustable time from front panel. External AGC Automatic, with fine ADJ back panel. Modulation Mode Mono, Stereo, Multiplex, SCA, RDS, Aux. Preemphasis Flat/50/75µs selectable from front panel.
	Power Reduction Scheduler (or equivalent)	
6	Label Italy (or equivalent) Wideband FM Dipole Antenna with Female N Type input and Clamp (or equivalent)	Freq. range: 87.5 - 108 MHz Impedance: 50 Ohm V.S.W.R. : < 1.25:1 Gain: 2 db Connector: 7/16" Weight: 4,5 Kg Max power: 2000W Polarization: vertical Dimensions: 1400x850x60 mm Material: Aluminium Alodine
6	5.5m RG213 Jumper Leads with N Type Male Connectors fitted at both ends	5.5m RG213 Jumper Leads with N Type Male Connectors fitted at both ends. 50 Ohm Impedance.
1	Label Italy 4 Way Antenna Splitter with N Type female outputs and 7/16 DIN Female input	4 Way Antenna Splitter with N Type female outputs and 7/16 DIN Female input
1	MBH-78S Multi Block Single Hanger kit of 20 for 7/8 Coaxial Cable	Multi Block Single Hanger kit of 20 for 7/8 Coaxial Cable
2	M10x130mm Studding Kit of 10 (10 x M10 x 130mm Stud 30 x Nuts 30 x Flats 20 x SCWashers)	M10x130mm Studding Kit of 10 (10 x M10 x 130mm Stud 30 x Nuts 30 x Flats 20 x SCWashers)
1	80m 7/8" High Power Coaxial RF Antenna Cable	80m 7/8" 50 Ohm Coaxial RF Antenna Cable. Power Handing: 2kW. Inner conductor Material smooth copper tube Diameter (mm) 9.2 Dielectric Material gas-injected cellular polyethylene Diameter (mm) 23.5 Outer conductor Material corrugated copper tube Diameter (mm) 25.0 Jacket Material black polyethylene Thickness (mm) 1.4 Diameter (mm) 27.8
1	Weatherproof Cable ties pack of 100	300mm x 4.6mm. UV resistant for outdoor use
1	Grounding Kit for Antenna Cable	Type of Grounding Kit High Speed. Transmission Line Type LCF78, HB078. Cable Type Coaxial Foam Dielectric, Hybrid. Cable Size 7/8". Number of Cable / Waveguide Runs 1. Grounding Kit Body: Stainless steel, with vulcanised EPDM (Ethylene-Propylene-Caoutchouc) Screws: Stainless steel with safety washers Contact element: Tin-plated copper mesh

2	Weatherproofing Kit for Antenna Cable	Kit consists of: 6 rolls of butyl mastic tape, 63 mm x 0.60 m (2-1/2" x 2') 1 roll black electrical tape, 50 mm x 6 m (2" x 20') 2 rolls black electrical tape, 19 mm x 20 m (3/4" x 66')
4	7-16 DIN Male Connector for 7/8" Coaxial Cable	Transmission Line Type Coaxial Cable. Cable Size 7/8. Cable Type Air Dielectric. Connector Interface 7-16 DIN. Sealing Method Sealing compound. Gender Male
1	600cm Deep Equipment Rack for Transmitter and Rack Accessories (Pack of 50 M6 Nuts, Bolts and Washers)	600cm Deep Equipment Rack for Transmitter and Rack Accessories (Pack of 50 M6 Nuts, Bolts and Washers)
3	5 Port Wireless Network Router	Network Switch with durable metal casing: 5 Gigabit ethernet ports Plug and play 5 port gigabit switch, no configuration required ethernet switch
1	CAT 5 Network Cable with RJ45 Connectors at Both Ends 5m	Cable Code, Cat 5e. Cable End Type RJ45. Cable Length 5 m. Cable Product Type. Ethernet. Cable Profile Round. Indoor Usage. Manufacturer Guarantee 1 Year Guarantee.
2	Barix Exstreamer Audio over IP Decoder (or equivalent)	Standalone IP Audio Decoder Device with support for MP3, PCM and VoIP (uLAw/aLaw) audio codecs • Supports IP streaming standards such as TCP/IP, RTP, SIP, Shoutcast, Multicast • Simple bowser based device management, SNMP Monitoring

1	Complete VHF Link with TX, RX, 2 x Yagi antennas with Clamps and 50m cables.	TX: Frequency Range 200~960 MHz <10MHz sub-band; 1.3~2.5 GHz <20MHz sub-band. Type of Modulation FM Class F3. VCO Tuning 25 MHz. Frequency Stability ± 2,5ppm (Better 0n request). Synthesizer Step 25KHz Power Output 5/10/20W depends of band. Spurious Emission < -80 dB or better. Harmonic Emission < -65 dB. Stereo Separation > 55 dB @ 1 KHz. Distorsion < 0.2% (TYP 00.8 %) @ 1KHz). Base Band 30 Hz -60 KHz within 0.15 dB. Unweighted S/N Ratio S/N Ratio > 72 dB rms at 30 Hz ~ 20 KHz. Emphasis 50 or 75 µS -selectable RF Connectors N-F 50 ohm. Input Base Band Imp. 2 Kohm. Input Mono Impedence 600 Ohm. Cooling Forced air. OP. Temperature Range 0 ÷ +50°C. Maximum Umidity 90%. AC Supply 100 ÷ 240 Volt; 47 ÷ 63 Hz. Dimensions: 1 Units Rack 19" 44 cm Depth RX: Frequency Ranges 200~960 MHz <10MHz sub-band ; 1.3~2.5 GHz <20MHz sub-band. Type of Modulation FM Class F3. VCO Tuning 25 MHz. Frequency Stability ± 2.5 ppm. Synthesizer Step 25KHz. Image Rejection 60dB Typ. RN Noise Figure 6dB or lower. Stereo Separation > 45 dB @ 1 KHx. Distortion < 0.5% (TYP 0.2 % @ 1KHz). Base Band 30 Hz -60 KHz within 0.08 dB. S/N Ratio > 72 dB with 0.2 mV input (Typ 78 dB). Deemphasis 50 or 75 µS int. selectable. RF Connectors N-F 50 ohm B. Band-IF Conn. BNC-F. Base-Band Imp. < 30 ohm. Cooling Forced air. P. Temp. Range 0 ÷ +50°C. Maximum Umidity 90%. AC Supply 100 ÷ 240 Volt; 47 ÷ 63 Hz. Dimensions 1 Units Rack 19" 44 cm Depth Yagi Antennas: Socket: N Type Female Power Capacity: 50W Material: Aluminium Clamp: Yes Impedance: 50 Ohm Cables: Type: RG213 Connectors: N Type Male (Fitted) Impedance: 50 Ohm Length: 50m
1	Rackmount FM Broadcast Audio Processor (Axel Falcon 7 or equivalent)	All-in-one 5 Bands Audio Processor with MPX Generator, MPX power Control and Change Over/Silence Detector
1	Surge and RF Interference Protected Rackmounted PDU	19" 1U rack mountable Illuminated power switch Flip-up switch access cover helps to reduce accidental switching 6x UK outlet sockets Surge protection with LED indicators 1.8m Lead with UK plug and 13A fuse Max. Load: 13A Total load: 3000W Power supply: 240V AC Dimensions (WxHxD): 482x45x45mm
PV Solar		
1		
18	400W Solar Module	Maximum Power (Pmax): 400W Maximum Power Current (Ipm): 13.15A Maximum Power Voltage (Vpm): 30.42V Short Circuit Current (Isc): 13.71A Power Output Tolerance (Pmax): 0/+3 Open Circuit Voltage (Voc): 36.98V Nominal Operating Cell Temp. (NOCT): -40 to +85°C Maximum System Voltage: 1000V DC Maximum Efficiency: 20.48%
6	Black Solar Cable 4mm Single-Core (2 x 10m) with MC4	4mm Diameter. MC4 Connectors Fitted

2	DC Isolator Switch (3 string)	Depth: 100mm (including switch) Length: 162mm Width: 85mm Weight: 390g Waterproof rating IP66/IP67
2	Victron SmartSolar MPPT Charge Controller 150/70 (or equivalent)	Maximum Power Point Tracking. Self-consumption Less than 35 mA @ 12 V / 20 mA @ 48 V. Battery voltage 12/24/48 V Auto Select. Rated charge current 70 A. Protection PV reverse polarity / Output short circuit / Over temperature. Operating temperature -30 to +60 °C (full rated output up to 40 °C). Data communication VE.Can, VE.Direct and Bluetooth. Safety EN/IEC 62109-1, UL 1741, CSA C22.2.
1	Victron RJ45 UTP Cable 0.3m (or equivalent)	0.3m length with RJ 45 Connectors at both ends
1	FUSE KIT BELOW - 16MMSQ - 1M - 80A FUSE - 10MM LUGS:	
1	16mm sq BLACK Battery Cable - 1000mm - 10mm LUG	16mm sq BLACK Battery Cable - 1000mm - 10mm LUG
1	16mm sq RED Battery Cable - 1000mm - 10mm LUG	16mm sq RED Battery Cable - 1000mm - 10mm LUG
1	80A Midi Fuse – CRIMPED	80A Midi Fuse – CRIMPED
1	FUSE KIT BELOW - 16MMSQ - 1M - 80A FUSE – 8MM/10MM LUGS:	
1	16mm sq BLACK Battery Cable - 1000mm – 8mm/10mm LUG	16mm sq BLACK Battery Cable - 1000mm – 8mm/10mm LUG
1	16mm sq RED Battery Cable - 1000mm – 8mm/10mm LUG	16mm sq RED Battery Cable - 1000mm – 8mm/10mm LUG
1	80A Midi Fuse – CRIMPED	80A Midi Fuse – CRIMPED
1	2000KVA Inverter Victron (or equivalent)	Bluetooth built-in: fully configurable with a tablet or smartphone - Low battery voltage alarm - Low battery voltage cut-off and restart levels - Dynamic cut-off: load dependent cut-off level - Output voltage: 210 - 245V - Frequency: 50 Hz or 60 Hz - ECO mode on/off and ECO mode sense level - Alarm relay Monitoring: - In- and output voltage, load and alarms
12	Battery Balancer Victron (or equivalent)	LED indicators Green: on (battery voltage > 27,3V) Orange: lower battery leg active (deviation > 0,1V) Orange: upper battery leg active (deviation > 0,1V) Red: alarm (deviation > 0,2V). Remains on until the deviation has reduced to less than 0,14V, or until system voltage drops to less than 26,6V. Alarm relay Normally open. The alarm relay closes when the red LED switches on and opens when the red LED switches off. Alarm reset Two terminals are available to connect a push button. Interconnecting the two terminals resets the relay. The reset condition will remain active until the alarm is over. Thereafter the relay will close again when a new alarm.
2	Victron Busbar 600A 8P + cover (or equivalent)	Max. current 600 A Max. Voltage 70 VDC Terminal diameter 3/8 inch / 9.53 mm Terminal height 0.76 inch / 19 mm Terminal material Stainless steel Flange nut material Stainless steel

32	260 Amphour 12V Batteries	260 Ah - 12 Volt, AGM Lead Acid. Maintenance Free.
24	Battery Cable 40mm2 - BLACK/RED SERIES with LUGS – 300mm	40mm sq diameter. Black / Red Colour 300mm Length 10mm LUGS
24	40mm sq BLACK Battery Cable - 600mm - 10mm LUGS	40mm sq diameter. Colour BLACK. 600mm length. 10mm LUGS
8	40mm sq RED Battery Cable - 600mm - 10mm LUGS	40mm sq diameter. Colour RED. 600mm length. 10mm LUGS
32	4mm sq BLACK Cable - 1000mm - 10mm LUGS	4mm sq BLACK Cable - 1000mm - 10mm LUGS
32	Mini Blade Fuse - 10A – CRIMPED	Mini Blade Fuse - 10A – CRIMPED
4	Mini Blade Fuse - 10A – CRIMPED	Mini Blade Fuse - 10A – CRIMPED
4	4mm sq RED Cable - 1000mm - 10mm LUGS	4mm sq RED Cable - 1000mm - 10mm LUGS
Miscellaneous		
2	63A distribution board with 3 x 32A breaker, 3 x 16A breaker, 40kA surge protector, 16KA surge protector and 63VA voltage control regulator.	63A distribution board with 3 x 32A breaker, 3 x 16A breaker, 40kA surge protector, 16KA surge protector and 63VA voltage control regulator.
2	10kva Servo type AVR. Brand – (Vectronic or equivalent)	10KVA Capacity. 1 Phase-Servo Type. Input voltage: 130V-260V AC Power: 10KVA Frequency: 50Hz/60Hz Delay Time: Short Delay (3-5 sec) Over-voltage protection: AC246 ± 4V
2	UPS (10KVA) (Eaton / Riello / APC or equivalent)	Main Output Voltage 230 V. Other Output Voltage 220 V 240 V. Rated power in W 10000W. Rated power in VA 10000 VA. Output connection type 6 IEC 60320 C13 3 IEC Jumpers 4 IEC 60320 C19. Output connector type Hard wire 3-wire (H N + E) 1. Number of rack unit 6U. Battery type Lead-acid battery.
2	Isolating gear switch 63A	Isolating gear switch 63A
4	FM Radio Receivers with digital display and power lead	FM Band 88 – 108 MHz. Input voltage: 220 VAC. Built In Speakers. Digital Display of Frequency.