



CENTRALBIDDING
FROM CENTRAL AUCTION HOUSE

**5000123689 ONE TIME PURCHASE OF MDS ORBIT LN SERIES RADIOS
FOR THE JEFFERSON PARISH DEPARTMENT OF DRAINAGE**
Jefferson Parish Government

Project documents obtained from www.CentralBidding.com

06-Aug-2018 10:34:37 AM



Bid Number 50 - 123689

One time purchase of MDS Orbit LN series radios for the Jefferson Parish Department of Drainage.

August 16, 2018 AT 2:00 PM

ATTENTION VENDORS!!!

Please review all pages and respond accordingly, complying with all provisions in the technical specifications and Jefferson Parish Instructions for Bidders and General Terms and Conditions. All bids must be received in the Purchasing Department by the bid due date and time.

**Jefferson Parish Purchasing Department
200 Derbigny Street
General Government Building, Suite 4400
Gretna, LA 70053
Donna Reamey
Dreamey@Jeffparish.net
504-364-2684**

MDS Orbit LN Series

High Speed, Long Range, Exceptional Performance for Narrowband Licensed Networks

The MDS™ Orbit Licensed Narrowband (LN) Series radios implement the advanced networking and security features of the MDS Orbit platform to bring new levels of performance and versatility to networks utilizing narrowband licensed spectrum in the 400 and 900 MHz frequency bands. In addition to the core feature suite derived from the Orbit platform, the LN Series radios implement high speed QAM modulation options for a 6 times speed improvement over other narrowband solutions operating in 6.25, 12.5 and 25 KHz channel sizes.

The MDS Orbit LN Series radios are available in both the MCR (Multiservice-Connect Router) and ECR (Edge-Connect Router) models. Both the MCR and ECR share the same networking and security functionality with the MCR being a dual radio router while the ECR supports a single LN radio with optional WiFi in a more compact form factor. The MCR-LN and ECR-LN support IP/Ethernet and serial communication for data acquisition applications to remote PLC, control and metering devices.

Users can simultaneously operate multiple host systems, remote device types and protocols to support SCADA and M2M applications on a common infrastructure.

Key Benefits

- Improved performance for data acquisition and control networks implementing IP/Ethernet communication to remote devices
- Repurpose narrowband networks for new applications through a 6X increase in communication speed
- Secure your network and assets by implementing best-in-class cyber security
- Support converged network applications and hybrid wireless solutions through advanced wireless routing and quality of service
- Implement push communication and report by exception from remote devices

Applications



Oil & Gas

- Remote data collection from meters and flow devices
- Monitor and transmit wellhead performance and status data



Energy

- Remote control of IEDs and controllers at distribution substations
- Condition monitoring for reclosers and capacitor banks



Water & Wastewater

- Monitor lift stations across multiple sites from the control room
- Remote PLC communication for controlling level and flow



Heavy Industrial

- Monitor and control remote pumps and compressors
- Transmit video and remote site security information

Industrially Hardened

- Operating temperature range -40°C to 70°C
- CSA Class 1, Div 2 for hazardous locations
- IEEE* 1613, IEC* 61850-3 for electric substation environments
- 5-year warranty

Advanced Networking

- 10 Watt peak power with coverage up to 50 miles
- Concurrent routing and bridging enables flexibility for a variety of network designs
- Flexible quality of service (QoS) to prioritize network applications and device connectivity
- Hybrid wireless routing to support two wireless media in a single device

Exceptional Performance

- QAM Modulation providing 120 kbps in 25 KHz and 60 kbps in 12.5 KHz channel
- Real-time adaptive modulation automatically adjusts speed to signal characteristics
- Dynamic FEC extends range in difficult conditions
- IP Header and Payload compression to

improve throughput over 30%

Enterprise Security

- Enterprise-class device and network cyber security functionality for advanced protection of network assets
- AES 128/256 encryption
- Public Key, EAP TLS, Pre-shared, IKE 1-2 Radius Authentication

LN Series

Exceptional Network Performance

Improved productivity, optimization, preventive maintenance, quality control, regulatory compliance, safety and security are just a few of the requirements that drive the need for high performance networks to support multiple applications and deliver actionable data collected from remote, geographically dispersed assets.

The MDS Orbit MCR-LN and ECR-LN radios bring new levels of networking performance to users operating narrowband licensed networks in 6.25, 12.5 and 25 KHz channel sizes.

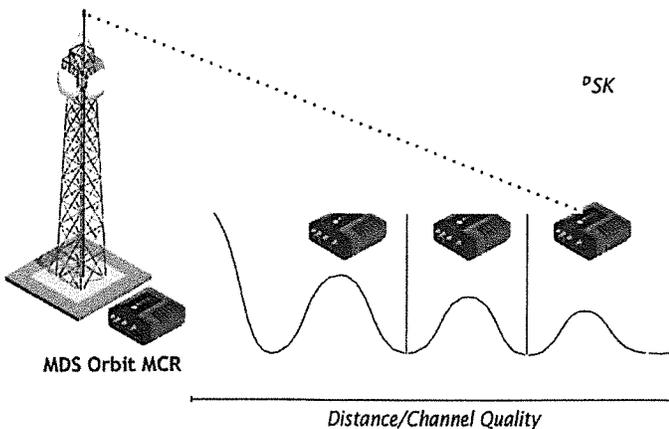
QAM Modulation

The LN Series radios implement QAM modulation to achieve raw data rates up to 6 times faster than traditional FSK modulation variants typically utilized in legacy narrowband networks. Through QAM modulation, speeds up to 120 kbps in a 25 KHz channel and 60 Kbps in 12.5 KHz are achieved.

CHANNEL SIZE	LEGACY SPEED	ORBIT LN SERIES SPEED		
		QPSK	16QAM	64QAM
6.25 KHz	4.8 kbps	9.6 kbps	19.2 kbps	28.8 kbps
12.5 KHz	9.6 kbps	20.0 kbps	40.0 kbp	60.0 kbps
25.0 KHz	19.2 kbps	40.0 kbps	80.0 kbps	120.0 kbps

Real Time Adaptive Modulation

Real time adaptive modulation automatically selects the optimum modulation type per remote radio to achieve the best speed. Adaptive modulation is implemented for both upstream and downstream communication. The Access Point continually monitors signal quality and adapts the modulation type accordingly.



Dynamic Forward Error Correction

Users can activate MDS proprietary dynamic Forward Error Correction (FEC) to improve the radio receive sensitivity for networks operating in high interference environments or when operation at or near sensitivity limits is necessary. Dynamic FEC improves sensitivity between 3 to 7 dBm. The LN radio automatically optimizes the FEC coding block to the data packet size to minimize network overhead and maintain the best network throughput.

CHANNEL SIZE	SENSITIVITY USING QPSK MODULATION	
	Typical	With FEC Max Coding
6.25 KHz	117 dBm	124 dBm
12.5 KHz	112 dBm	119 dBm
25.0 KHz	107 dBm	114 dBm

IP Header and Payload Compression

For networks operating TCP and UDP protocols, the LN series implements IP Header and Payload compression to improve network throughput. TCP sessions in particular involve a significant amount of handshaking between host systems and remote devices. Virtual over-the-air throughput increases the raw data rates of 30% or more depending upon the compressibility of data packets being transmitted.

Media Access Control

Media Access Control (MAC) is a critically important function particularly in narrowband networks as it is responsible for maintaining optimal network throughput even as more devices and applications are added. The LN series radios implement a proprietary contention MAC designed specifically to consume very little overhead. The LN Series MAC guarantees that user data never collides and that data packets reach the intended destination, preventing throughput drops in congested networks.

Advanced Networking

The Orbit platform endows the LN Series with an advanced array of networking capabilities including simultaneous Layer 2 bridging and Layer 3 routing. Tunneling, integrated terminal server functionality and protocol conversion are also supported.

Quality of Service

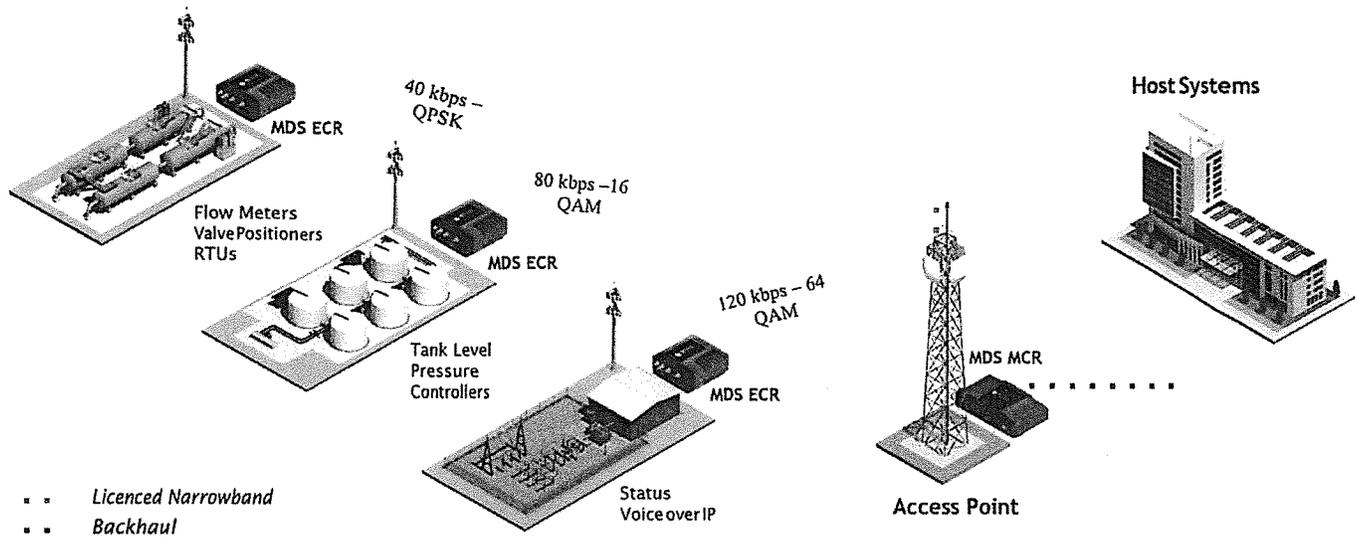
Quality of Service (QoS) allows the user to prioritize the flow of information over the network by application and interface using up to 16 QoS priorities. Layer 2, 3 and 4 classification enables the detailed identification of all types of applications for maximum flexibility in addition to standard 802.1p and DSCP based classifications. Traffic Shaping allows users to allocate a percentage of the uplink bandwidth on a per-application basis in order to ensure more deterministic data transmission during network congestion.

Hybrid Wireless

The Orbit LN Series brings added levels of network versatility by supporting seamless bridging and routing through multiple wireless options. This allows users to create separate field subnetworks, extend communications, or support integrated backhaul alternatives.

Both the MCR-LNx and ECR-LNx models support an optional, secure WiFi option. The MCR-LNx will support a second wireless option from other Orbit radio options including unlicensed 900 MHz or 4G LTE, and 3G cellular.

Orbit LN Series Application Advantages



Connectivity

- Connect multiple RTU and Controller types to a single remote radio
- Interface multivariable transmitters via serial or WiFi
- Use Ethernet for PLC or Voice over IP

Performance

- Use advanced QoS to prioritize critical SCADA over lower priority traffic
- Activate compression for >30% throughput improvement
- Adaptive modulation automatically adjusts optimum speed per remote

Communication

- Concurrently operate multiple host systems, applications and protocols
- Network security with robust encryption and authentication
- Use routing and bridging capabilities for more advanced deployments

Enterprise Security

The Orbit LN Series provides a best-in-class cyber security suite designed to meet stringent security requirements such as NERC-CIP and FIPS. It offers a versatile range of options allowing the user to scale security levels to their unique network conditions.

Orbit LN Series secures the network by supporting AES 128/256 encryption, IPSec VPN encryption (server and client), certificate management, firewalling and stateful packet inspection to insure that the data is protected, and only valid/legitimate data is permitted to flow. The user is secured through central and local authentications and authorization to insure access only with proper privileges. The radio itself is secure through digitally signed firmware, hardware and manufacturing implementations to insure hardware/firmware integrity.

Intuitive User Interface

An easy-to-use Graphical User Interface (GUI) allows for the quick provisioning and maintenance from a web browser. Orbit LN Series radios support HTTP, HTTPS, and SSH. MDS Orbit's wizards accelerate the configuration of complex network functionality by breaking down processes into simple, concise and automated steps.

Network Management

The Orbit platform supports management using SNMPv1/v2/v3, MIN-II and Enterprise MIB. NETCONF is also supported. Manage Orbit LN Series networks using PulseNET NMS. PulseNET is purpose built for industrial communications and includes sophisticated and meaningful pre-built workflows along with intuitive graphical representations of the network at your fingertips.

Orbit ECR and MCR Model Comparison

MODEL	PRIMARY WIRELESS	SECOND WIRELESS OPTION	COMMUNICATION PORTS	MOUNTING
MCR	LN4: 400 MHz LN9: 900 MHz**	WiFi 4G LTE/3G ** Unlicensed 900 MHz**	Option A: 2 Ethernet, 1 Serial, 1 USB Option B: 1 Ethernet, 2 Serial, 1 USB	Surface Mount DIN Mount Option
ECR 	LN4: 400 MHz LN9: 900 MHz**	WiFi	1 Ethernet, 1 Serial, 1 USB	Surface Mount DIN Mount Option

Specifications

GENERAL	
Frequency	Configurable
Operation Modes	Simplex, half-duplex
Modulation	Access Point, Remote, Store & Forward**
FEC	QPSK, 16QAM, 64QAM Per-Remote Adaptive Modulation
Compression Range	Dynamic Forward Error Correction Header and Payload Compression Up to 50 Miles

CHANNEL SIZE	MODULATION & SPEED		
	QPSK	16QAM	64QAM
6.25 KHz	9.6 kbps	19.2 kbps	28.8 kbps
12.5 KHz	20.0 kbps	40.0 kbps	60.0 kbps
25.0 KHz	40.0 kbps	80.0 kbps	120.0 kbps

FREQUENCY BANDS	
LN4	L4E: 406 - 470 MHz
LN9	L9C: 928 - 960 MHz **

TRANSMITTER	
Frequency Stability	+/- 0.5 ppm
Peak Carrier Power	10 W/40 dBm
Average Power (Programmable)	QPSK: 0.1 - 5 W/10-37 dBm 16QAM: 0.1 - 3.2 W/10-35 dBm 64QAM: 0.1 - 2.5 W/10-34 dBm
Carrier Power Accuracy	+/- 1.5 dB typical
Output Impedance	50 Ohms
Adjacent Channel Power	< -60 dBc

RECEIVER	
Type	Direct Conversion
Adjacent Channel Rejection	60 dB nominal
Sensitivity	Typical @ 1x10 ⁻⁶ BER
	QPSK 16QAM 64QAM
6.25 KHz	-117 dBm -104 dBm -96 dBm
12.5 KHz	-112 dBm -104 dBm -94 dBm
25.0 KHz	-107 dBm -99 dBm -91 dBm
Sensitivity w/ FEC	Dynamic FEC Max Coding
	QPSK 16QAM 64QAM
6.25 KHz	-124 dBm -111 dBm -103 dBm
12.5 KHz	-119 dBm -111 dBm -101 dBm
25.0 KHz	-114 dBm -106 dBm -98 dBm

NETWORKING	
Routing	IPv4 Routing with Failover, OSPF, RIPv2 Concurrent bridging and routing
Ethernet	IEEE 802.3, 802.1Q/VLANs, IGMP, STP, 64 VLANs
Tunneling	Layer 2 (Ethernet) and Layer 3 GRE
Quality of Service	Quality of Service 16 egress queues, Priority Queuing, Fair Queuing, Classification based on DSCP, 802.1p and Layer 2-4 classifiers
IP Protocols	TCP, UDP, ARP, DHCP, ICMP, NTP, FTP, SFTP, TFTP, DNS, configurable HTTP and HTTPS, SSH
Compression	TCP/UDP ROHC, LZ0
Dynamic FEC	Convolutional, Reed Solomon
Serial	TCP server, Modbus/TCP/RTU/ASCII conversion, TCP client, UDP Unicast and Multicast, BSAP, and DNP3

INTERFACES	
MCR Option A	(2) 10/100 Ethernet, RJ45 (1) RS232/485 Serial, RJ45 (1) mini USB 2.0
MCR Option B	(1) 10/100 Ethernet, RJ45 (2) RS232/485 Serial, RJ45 (1) mini USB 2.0
ECR	(1) 10/100 Ethernet, RJ45 (1) RS232/485 Serial, RJ45 (1) mini USB 2.0
Antenna MCR/ECR	TNC Female (RP-SMA for WiFi)

SECURITY	
IPSec VPN	Server (responder) & Client (Initiator)
Authentication	Public Key, EAP TLS, Pre-shared, lke 1-2
User Authentication	Local RBAC, AAA/RADIUS
Encryption	3DES, AES 128/192/256, CBC, CTR, CCM, GCM, SHA 256/384/512 HMAC
Firewall	Stateful L3-4 Access Control List, Layer 2 MAC Filtering, NAT, Source NAT (Masquerading), Static NAT, Port Forwarding
Device Security	Secure Boot, Secure Firmware, Digitally Signed Hardware and Software, Magnetometer Tamper Detection
Certificate Mgt.	X.509, SCEP, PEM, DER, RSA

ENVIRONMENTAL	
Temperature	-40 to +70 C (-40 to 158 F)
Humidity	95% at 60 C (140 F) non-condensing

MECHANICAL	
Case	Rugged die-cast aluminum
Dimensions MCR	1.75 H x 8.0 W x 4.8 D in. 4.45 H x 20.32 W x 12.19 D cm
Weight MCR	2 lbs., .91 kg
Dimensions ECR	2.1 H x 4.3 W x 4.6 D in. 5.33 H x 10.92 W x 11.68 D cm
Weight ECR	1.45 lbs., .65 kg

ELECTRICAL		CURRENT REFERENCE - 13.8V
Primary Power	10 to 60 VDC	
50% Duty Cycle	AP: 950 mA, Remote: 780 mA	
Idle	AP: 910 mA, Remote: 350 mA	

APPROVALS	
CSA Class 1 Div 2 for hazardous locations	
IEEE 1613, IEC 61850-3	
Industry Canada & ENTELA	
FCC Part 90: LN4 FCC Part 101: LN9** (See note below)	
ETSI/CE: LN4	

WIFI OPTION	
Frequency 2.4GHz	
Standard IEEE 802.11 b/g/n	
Maximum Data Rate: 54Mbps	
Operating Modes: Access Point, Station	
2 SSIDs, SSID hiding	
VLAN mapping	
Security: WPA/WPA2 PSK, Enterprise	
Carrier Power: 20dBm adjustable	

WARRANTY	
5-year standard warranty	

Ordering

MXNX *** N *** NNS * F 5 * UNN Description

Band	L4E	L9C	NNN	WS1	:	D	Description
							406-470 MHz
							928-960 MHz **
							No second wireless
							WiFi - 802.11b/g/n
							2-Ethernet ports, 1-Serial port
							1-Ethernet port, 2-Serial ports
							Surface mounting bracket
							DIN mounting bracket

MCR Order Code Example
MXNXL4ENNNNNNS1F5SUNN

- MCR-L4E
- 406-470 MHz
- 2 Ethernet and 1 Serial port
- Standard surface mounting bracket

Band	L4E	L9C	NNN	WS1	:	D	Description
							406-470 MHz
							928-960 MHz **
							No second wireless
							WiFi - 802.11b/g/n
							Surface mounting bracket
							DIN mounting bracket

ECR Order Code Example
ECRL4ENW51NS1SUSUNNN

- ECR-L4E
- 406-470 M
- 1 Ethernet and 1 Serial port
- WiFi option enabled
- Standard surface mounting bracket

** Check with factory for availability of this option. Scheduled for future release.

DATE: 8/01/2018
BID NO.: 50-00123689

INVITATION TO BID
THIS IS NOT AN ORDER

Page: 1

JEFFERSON PARISH

PURCHASING DEPARTMENT
P.O. BOX 9
GRETNA, LA. 70054-0009
504-364-2678

BUYER: DREAMEY@jeffparish.net

BIDS WILL BE RECEIVED IN THE WEST BANK PURCHASING DEPT, SUITE 4400, JEFFERSON PARISH GENERAL GOVERNMENT BUILDING, 200 DERBIGNY STREET, GRETNA, LA 70053 UNTIL 2:00 PM, 8/16/2018 AND PUBLICLY OPENED THEREAFTER.

For convenience, bidders may also submit bids in the East Bank Purchasing Department, Suite 404, Jefferson Parish Joseph S. Yenni Building, 1221 Elmwood Park Blvd., Jefferson LA 70123. However, if submitting bids on the day of bid opening, bidders must submit at the West Bank location only. All bids will be publicly opened at the West Bank location.

At no charge, bidders may also submit via Jefferson Parish's electronic procurement page by visiting www.jeffparishbids.net to register for this free site. Additional instructions are included in the text box highlighting electronic procurement.

LATE BIDS WILL NOT BE ACCEPTED

Unless submitting via online (see Page 3), each bid must be submitted in a sealed envelope bearing on the outside; the name of the Bidder, his address, and the name of the project for which the bid is submitted and the bid number.

NOTE: ONLY BIDS WRITTEN IN INK OR TYPEWRITTEN, AND PROPERLY SIGNED BY A MEMBER OF THE FIRM OR AUTHORIZED REPRESENTATIVE, WILL BE ACCEPTED. PENCIL AND/OR PHOTOSTATIC FIGURES OR SIGNATURES SHALL RESULT IN BID REJECTION.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

THE FOLLOWING INSTRUCTIONS APPLY TO ALL BIDS

All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal reference. By submitting a bid, vendor agrees to comply with all provisions of Louisiana Law as well be in compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, applicable Jefferson Parish ethical standards and Jefferson Parish Resolution No. 113646 and/or Resolution No. 113647.

All vendors submitting bids should register as a Jefferson Parish vendor if not already yet registered. Registration forms may be downloaded from <http://purchasing.jeffparish.net> and by clicking on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Further, a current W-9 form and respective Tax Identification number must be supplied upon contract execution, should you be awarded a contract and/or issued purchase order. Failure to do so may result in delay of payment.

All quotations shall be based on F.O.B. Agency warehouse or job site, anywhere within the Parish as designated by the Purchasing Department. This provision does not apply to public works projects

JEFFERSON PARISH requires all products to be new (current) and all work must be performed according to standard practices for the project. Unless otherwise specified, no aftermarket parts will be accepted. Unless otherwise specified, all workmanship and materials must have at least one (1) year guaranty, in writing, from the date of delivery and/or acceptance of the project. Any deviations or alterations from the specifications must be indicated and/or supporting documentation supplied with bid submission.

Bidders should submit all questions in writing via email to the buyer's email address as indicated above, no later than Five (5) working days prior to the bid opening. Bid numbers should be mentioned in all requests. If submitting online, vendors may send questions via the E-Procurement site no later than Five (5) working days prior to the bid opening.

If this bid requires a pre-bid conference (see Additional Requirements section), bidders are advised that such conference will be held to allow bidders the opportunity to identify any discrepancies in the bid specifications and seek further clarification regarding instructions. The Purchasing Department will issue a written response to bidders' questions in the form of an Addendum. Please note that all official communication will be expressed in the form of an addendum.

All formal Addenda require written acknowledgement on the bid form by the bidder. Failure to acknowledge an Addendum on the bid form shall cause the bid to be rejected. JEFFERSON PARISH reserves the right to award bid to next lowest responsive and responsible bidder in this event.

The purpose and intention of this invitation to bid is to afford all suppliers an equal opportunity to bid on all construction, maintenance, repair, operating supplies and/or equipment listed in this bid proposal. JEFFERSON PARISH WILL ACCEPT ONE BID ONLY FROM EACH VENDOR. Items bid must meet specifications.

Visit our website at [HTTP://PURCHASING.JEFFPARISH.NET](http://PURCHASING.JEFFPARISH.NET)

DATE: 8/01/2018

BID NO.: 50-00123689

Page: 2

JEFFERSON PARISH will accept one price for each item unless otherwise indicated. Two or more prices for one item will result in bid rejection. Bidders are required to complete, sign and return the bid form and/or complete and return the associated line item pricing forms as indicated. Vendors must not alter the bid forms. Doing so will cause the bid to be rejected.

A corporate resolution or written evidence of the individual signing the bid having such authority must be submitted with the bid. Failure to comply will cause bid to be rejected. For corporate entities, such written evidence may be a printout of the Louisiana Secretary of State's website listing the signatory as an officer. Such printout shall be included with the bid submission. Bids submitted by Owners or Sole Proprietorships must include certification that he or she owns the entity for which the bid is signed. This documentation must be submitted with the bid. Failure to do so will result in bid rejection.

NOTE: A sample corporate resolution can be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document. A sample certification of sole proprietorship can also be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

A. AWARD OF CONTRACT: JEFFERSON PARISH reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination, as shall in its judgment be in the best interest of JEFFERSON PARISH. Every contract or order shall be awarded to the LOWEST RESPONSIVE and RESPONSIBLE BIDDER, taking into consideration the CONFORMITY WITH THE SPECIFICATIONS and the DELIVERY AND/OR COMPLETION DATE. SPLIT AWARDS MADE TO SEVERAL VENDORS WILL ONLY BE GRANTED TO THOSE DEEMED RESPONSIVE AND RESPONSIBLE.

All bid prices shall remain valid for 45 days. Jefferson Parish and the lowest responsive and responsible bidder(s) by mutual written consent may mutually agree to extend the deadline for award by one (1) or more extensions of thirty (30) calendar days.

PROTESTS: Only those vendors that submitted a bid in response to this solicitation may submit a protest in writing to the Director of the Purchasing within 48 hours of bid opening. The Purchasing Director will review it in connection with the Parish Attorney's Office which will then respond in writing as soon as possible.

PREFERENCE: Unless federal funding is directly spent by Jefferson Parish for this purchase, preference is hereby given to materials, supplies, and provisions produced, manufactured or grown in Louisiana, quality being equal to articles offered by competitors outside the state. "LSA – R.S. 38:2251-2261"

B. USE OF BRAND NAMES AND STOCK NUMBERS: Where brand names and stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bids may be submitted for products of equal quality, provided brand names and stock numbers are specified. Complete product data may be required prior to award.

C. CANCELLATION OF CONTRACT: JEFFERSON PARISH reserves the right to cancel all or any part if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel any contract at anytime and for any reason by issuing a THIRTY (30) day written notice to the contractor.

For good cause and as consideration for executing a contract with Jefferson Parish, vendor conveys, sells, assigns and transfers to Jefferson Parish or its assigns all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of Louisiana, relating to the particular good or services purchased or acquired by Jefferson Parish.

D. PRICES: Jefferson Parish is exempt from paying sales tax under LSA-R.S. 47:301 (8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and unless otherwise specified, shall be exclusive of state and Parish taxes. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit price shall prevail.

Quantities listed are for bidding purposes only. Actual requirements may be more or less than quantities listed.

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, or sex; nor discriminate on the basis of age under the Age Discrimination Act of 1975, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, or on the basis of religion, except that any exemption from such prohibition against discrimination on the basis of religion as provided in the Civil Rights Act of 1964, or Title VI and VII of the Act of April 11, 1968, shall also apply. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k)(5) of the Regulations. New construction or renovation projects must comply with Section 504 of the 1973 Rehabilitation Act, as amended, in accordance with the American National Standard Institute's specifications (ANSI A17.1-1961).

Jefferson Parish and its partners as the recipients of federal funds are fully committed to awarding a contract(s) to firm(s) that will provide high quality services and that are dedicated to diversity and to containing costs. Thus, Jefferson Parish strongly encourages the involvement of minority and/or woman-owned business enterprises (DBE's, including MBE's, WBE's and SBE's) to stimulate participation in procurement and assistance programs.

Advertised bids will be tabulated and a copy of the tabulation will be forwarded to each responding bidder.

IN ACCORDANCE WITH STATE REGULATIONS JEFFERSON PARISH OFFERS ELECTRONIC PROCUREMENT TO ALL VENDORS

This electronic procurement system allows vendors the convenience of reviewing and submitting bids online. This is a secure site and authorized personnel have limited read access only. Bidders are encouraged to submit electronically using this free service; while the website accepts various file types, one single PDF file containing all appropriate and required bid documents is preferred. Bidders submitting uploaded images of bid responses are solely responsible for clarity. If uploaded images/documents are not legible, then bidder's submission will be rejected. Please note all requirements contained in this bid package for electronic bid submission.

Please visit our E-Procurement Page at www.jeffparishbids.net to register and view Jefferson Parish solicitations. For more information, please visit the Purchasing Department page at <http://purchasing.jeffparish.net>.

The general specifications for construction projects and the purchase of materials, services and/or supplies are those adopted by the JEFFERSON PARISH Council by Resolution No. 113646 or 113647 dated 12/09/09. The general conditions adopted by this resolution shall be considered as much a part of this document as if they were written wholly herein. A copy may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, LA 70053. You may also obtain a copy by visiting the Purchasing Department webpage at <http://purchasing.jeffparish.net> and clicking on Online Forms.

ADDITIONAL REQUIREMENTS FOR THIS BID

PLEASE MATCH THE NUMBERS PRINTED IN THIS BOX WITH THE CORRESPONDING INSTRUCTIONS BELOW.

13 , 15

1. All bidders must attend the MANDATORY pre-bid conference and will be required to sign in and out as evidence of attendance. In accordance with LSA R.S. 38:2212(I), all prospective bidders shall be present at the beginning of the MANDATORY pre-bid conference and shall remain in attendance for the duration of the conference. Any prospective bidder who fails to attend the conference or remain for the duration shall be prohibited from submitting a bid for the project.
2. Attendance to this pre-bid conference is optional. However, failure to attend the pre-bid conference shall not relieve the bidder of responsibility for information discussed at the conference. Furthermore, failure to attend the pre-bid conference and inspection does not relieve the successful bidder from the necessity of furnishing materials or performing any work that may be required to complete the work in accordance with the specification with no additional cost to the owner.
3. Contractor must hold current applicable JEFFERSON PARISH licenses with the Department of Inspection and Code Enforcement. Contractor shall obtain any and all permits required by the JEFFERSON PARISH Department of Inspection and Code Enforcement. The contractor shall be responsible for the payment of these permits. All permits must be obtained prior to the start of the project. Contractor must also hold any and all applicable Federal and State licenses. Contractor shall be responsible for the payment of these permits and shall obtain them prior to the start of the project.
4. A LA State Contractor's License will be required in accordance with LSA R.S. 37-2150 et. seq. and such license number will be shown on the outside of the bid envelope. Failure to comply will cause the bid to be rejected. Additionally if submitting the bid electronically, then the license number must be entered in the appropriate field in the Electronic Procurement system. Failure to comply will cause the bid to be rejected.
5. It is the bidder's responsibility to visit the job site and evaluate the job before submitting a bid.
6. Job site must be clean and free of all litter and debris daily and upon completion of the contract. Passageways must be kept clean and free of material, equipment, and debris at all times. Flammable material must be removed from the job site daily because storage will not be permitted on the premises. Precautions must be exercised at all times to safeguard the welfare of JEFFERSON PARISH and the general public.

INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

7. **PUBLIC WORKS BIDS:** All awards for public works in excess of \$5,000.00 will be reduced to a formal contract which shall be recorded at the contractor's expense with the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. A price list of recordation costs may be obtained from the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. All awards in excess of \$25,000.00 will require both a performance and a payment bond. Unless otherwise stated in the bid specifications, the performance bond requirements shall be 100% of the contract price. Unless otherwise state in the bid specifications, the payment bond requirements shall be 100% of the contract price. Both bonds shall be supplied at the signing of the contract.
8. **NON-PUBLIC WORKS BIDS:** A performance bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The performance bond shall be supplied at the signing of the contract.
9. **NON-PUBLIC WORKS BIDS:** A payment bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The payment bond shall be supplied at the signing of the contract.
10. All bidders must comply with the requirements stated in the attached "Standard Insurance Requirements" sheet attached to this bid solicitation. Prior to contract executions/purchase order issuance, the successful bidder will be required to provide final insurance certificates which shall name Jefferson Parish as an additional insured in accordance with the instructions in the aforementioned "Standard Insurance Requirements" sheet.
11. A bid bond will be required with bid submission in the amount of 5% of the total bid, unless otherwise stated in the bid specifications. Acceptable forms shall be limited to cashier's check, certified check, or surety bid bond. All sureties must be in original format (no copies) If submitting a bid online, vendors must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.
12. This is a requirements contract to be provided on an as needed basis. JEFFERSON PARISH makes no representations on warranties with regard to minimum guaranteed quantities unless otherwise stated in the bid specifications.
13. Freight charges should be included in total cost when quoting. If not quoted FOB DELIVERED, freight must be quoted as a separate item. Bid may be rejected if not quoted FOB DELIVERED or if freight charges are not indicated on bid form.
14. **PUBLIC WORKS BIDS - Completed, Signed and Properly Notarized Affidavits Required;** This applies to all solicitations for construction, alteration or demolition of public buildings or projects, in conformity with the provisions contained in LSA-RS 38:2212.9, LSA-RS 38:2212.10, LSA-RS 38:2224, and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Conviction Affidavit, Non-Collusion Affidavit, Campaign Contribution Affidavit, Debt Disclosures Affidavit and E-Verify Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
15. **NON PUBLIC WORK BIDS - Completed, Signed and Properly Notarized Affidavits Required** in conformity with the provisions contained in LSA – RS 38:2224 and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Collusion Affidavit, Debt Disclosures Affidavit and Campaign Contribution Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled NON PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
16. The ensuing contract for this bid solicitation may be eligible for FEMA reimbursement and/or Federal funding/reimbursement. As such, the referenced appendix will be applicable accordingly and shall be considered a part of the bid documents. All applicable certifications must be duly completed, signed and submitted with bid submission. Failure to submit applicable certifications with bid submission will result in bid rejection.
17. For this project, the Contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which permanently incorporated in the project (hereinafter referred to as "applicable materials and equipment"). All purchases of applicable materials or equipment shall be made by the contractor on behalf of and as the agent of Jefferson Parish (Owner), a political subdivision of the State of Louisiana. No state and local sales and use taxes are owned on applicable materials and equipment under the provisions of Act 1029 of the 1991 Regular Session – Louisiana Revised Statute 47:301(8)(c). Owner will furnish contractor a certificate form which certifies that Owner is not required to pay such state or local sales and use taxes, and contractor shall furnish a copy of such certificate to all vendors or suppliers of the applicable materials and equipment

It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission: and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the Inspector General in any investigation, audit, inspection, performance review, or hearing pursuant to Jefferson Parish Code of Ordinances Section 2-155.10(19). By submitting a bid, vendor acknowledges this and will abide by all provisions of the referenced Jefferson Parish Code of Ordinances.

All Public Work Projects are required to use the Louisiana Uniform Public Work Bid Form

All prices must be held firm unless an escalation provision is requested in this bid. Jefferson Parish will allow one escalation during the term of the contract, which may not exceed the U.S. Bureau of Labor Statistics National Index for all Urban Consumers, unadjusted 12 month figure. The most recently published figure issued at the time an adjustment is requested will be used. A request must be made in writing by the vendor, and the escalation will only be applied to purchases made after the request is made.

Are you requesting an escalation provision?

YES _____ NO X

MAXIMUM ESCALATION PERCENTAGE REQUESTED _____%

INITIAL BID PRICES WILL REMAIN FIRM THROUGH THE DATE OF December 31, 2018

For the purposes of comparison of bids when an escalation provision is requested, Jefferson Parish will apply the maximum escalation percentage quoted by the bidder to the period to which it is applied in the bid. The initial price and the escalation will be used to calculate the total bid price. It will be assumed, for comparison of prices only, that an equal amount of material or labor is purchased each month throughout the entire contract.

DELIVERY: FOB JEFFERSON PARISH

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES 8-9 weeks ARO

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable) _____

THIS SECTION MUST BE COMPLETED BY BIDDER:

FIRM NAME: End 2 End Technologies

ADDRESS: 60 Sycamore Street West

CITY, STATE: St. Paul, MN ZIP: 55117

TELEPHONE: (651) 560-0321 FAX: ()

EMAIL ADDRESS: orders@e2etechinc.com

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: _____
NUMBER: _____
NUMBER: _____
NUMBER: _____

TOTAL PRICE OF ALL BID ITEMS: \$ Product: \$85,560 + Freight: \$450 = Total: \$86,010

AUTHORIZED SIGNATURE: *Kevin K May*

Kevin K May

TITLE: *POO*

Printed Name

SIGNING INDICATES YOU HAVE READ AND COMPLY WITH THE INSTRUCTIONS AND CONDITIONS.

NOTE: All bids should be returned with the BID NUMBER and BID OPENING DATE indicated on the outside of the envelope submitted to the Purchasing Department.

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00123689

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
1	60.00	EA	<p>ONE TIME PURCHASE OF MDS ORBIT LN SERIES RADIOS FOR THE JEFFERSON PARISH DEPARTMENT OF DRAINAGE.</p> <p>0010 - Orbit MCR LN9 Licensed Narrowband + 4G LTE US Verizon with GPS, 2 Ethernet, 1 Serial, with Standard Mount Item: MXNCL9CN4G5N1S1F6SUNN Vendor shall supply the latest software/ firmware associated with devices.</p>	1,426.00	85,560.00
2	1	EA	Freight		450.00

CORPORATE RESOLUTION

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF
END 2 END TECHNOLOGIES LLC
INCORPORATED.

AT THE MEETING OF DIRECTORS OF END 2 END TECHNOLOGIES LLC
INCORPORATED, DULY NOTICED AND HELD ON 8-13-2018,
A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT
WAS:

RESOLVED THAT KEVIN MAY, BE AND IS HEREBY
APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-
FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON
BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS
AND TRANSACTIONS WITH THE PARISH OF JEFFERSON OR ANY OF ITS AGENCIES,
DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE
EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES,
CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE ORDERS AND NOTICES
ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS
CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING
EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-
FACT.

I HEREBY CERTIFY THE FOREGOING TO BE
A TRUE AND CORRECT COPY OF AN
EXCERPT OF THE MINUTES OF THE ABOVE
DATED MEETING OF THE BOARD OF
DIRECTORS OF SAID CORPORATION, AND
THE SAME HAS NOT BEEN REVOKED OR
RESCINDED.


SECRETARY-TREASURER

8-13-2018
DATE

Non-Public Works Bid Affidavit Instructions

- **Affidavit is supplied as a courtesy to Affiants, but it is the responsibility of the affiant to insure the affidavit they submit to Jefferson Parish complies, in both form and content, with federal, state and parish laws.**
- **Affidavit must be signed by an authorized representative of the entity or the affidavit will not be accepted.**
- **Affidavit must be notarized or the affidavit will not be accepted.**
- **Notary must sign name, print name, and include bar/notary number, or the affidavit will not be accepted.**
- **Affiant MUST select either A or B when required or the affidavit will not be accepted.**
- **Affiants who select choice A must include an attachment or the affidavit will not be accepted.**
- **If both choice A and B are selected, the affidavit will not be accepted.**
- **Affidavit marked N/A will not be accepted.**
- **It is the responsibility of the Affiant to submit a new affidavit if any additional campaign contributions are made after the affidavit is executed but prior to the time the council acts on the matter.**

Instruction sheet may be omitted when submitting the affidavit

Non-Public Works Bid

AFFIDAVIT

STATE OF MINNESOTA

PARISH/COUNTY OF RAMSEY

BEFORE ME, the undersigned authority, personally came and appeared: KEVIN
MAY, (Affiant) who after being by me duly sworn, deposed and said that
he/she is the fully authorized CHIEF OPER. OFFICER of END 2 END TECH. LLC (Entity),
the party who submitted a bid in response to Bid Number 50-123639, to the Parish of
Jefferson.

Affiant further said:

Campaign Contribution Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____ Attached hereto is a list of all campaign contributions, including the date and amount of each contribution, made to current or former elected officials of the Parish of Jefferson by Entity, Affiant, and/or officers, directors and owners, including employees, owning 25% or more of the Entity during the two-year period immediately preceding the date of this affidavit or the current term of the elected official, whichever is greater. Further, Entity, Affiant, and/or Entity Owners have not made any contributions to or in support of current or former members of the Jefferson Parish Council or the Jefferson Parish President through or in the name of another person or legal entity, either directly or indirectly.

Choice B X there are **NO** campaign contributions made which would require disclosure under Choice A of this section.

Debt Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any and all debts owed by any elected or appointed official of the Parish to the Affiant.

Choice B There are NO debts which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

[The remainder of this page is intentionally left blank.]

That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.

Kevin K May
Signature of Affiant

Kevin K May
Printed Name of Affiant

SWORN AND SUBSCRIBED TO BEFORE ME
ON THE 14 DAY OF August, 2018.

Karen K Hartmann
Notary Public

Karen K Hartmann
Printed Name of Notary


Notary Public - Minnesota
My Commission Expires Jan 31, 2020

My commission expires Jan. 31, 2020.



JEFFERSON PARISH

Department of Purchasing

Michael S. Yenni
Parish President

Renny Simno
Director

July 2018

CHANGES TO JEFFERSON PARISH BIDDING PROCEDURES

The East bank Office of Purchasing is now open! We are located in the Joseph S. Yenni Building, 1221 Elmwood Park Blvd., Suite 404, Jefferson, LA 70123. Bidders may submit bid responses at this location, pending authorization in each bid package. **Bidders should carefully read and must respond accordingly per the requirements of the bid packages. NOTE: Bidders submitting bids on the day of bid opening, bidders must submit at the West Bank location only.**

Other Changes Continued:

- For all advertised sealed bids, written evidence of signature authority must be included with bid submission.
- Current W9 Forms and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, a current W-9 form must be supplied upon contract execution, should you be awarded a contract and/or issued a purchase order.
- **Proof of insurance in the form of a current certificate evidencing coverages is required with bid submission.** Bidders must read the insurance requirements attachment included in each bid package for specific instructions. Upon contract execution, successful bidder must produce final insurance certificates in accordance with Jefferson Parish insurance requirements.

Bidders should reference the "Additional Requirements" section of the bid instructions and/or the "Important Notice to Bidders" included in the bid package for specific requirements to respond accordingly.

For more information, please call Jefferson Parish Purchasing at 504-364-2678.