



## Hitachi Kokusai Electric Comark LLC Proposal

P#5243-LPTV1500WV3-08/25/2021

For  
LPTV Low Power VHF Digital Television Transmitter

*Prepared for:*

**Jesse Angelo**

Hella TV

530-691-4017

[jesse@hellaradio.com](mailto:jesse@hellaradio.com)

**COMARK**  
**Communications**



**PROPOSAL REFERENCE #:**  
**P#5243-LPTV1500WV3-08/25/2021**

**Hitachi Kokusai Electric Comark LLC**

104 Feeding Hills Road  
Southwick, MA 01077  
TEL: (413) 998-1100  
FAX: (413) 998-1194

FEIN#27-4660540

Westfield Bank  
141 Elm Street  
Westfield, MA 01086  
ABA#211871604  
Account #1001323052  
Swift Code: WFLDUS33

**Subject: LPTV Low Power VHF Digital Television Transmitter**  
**Call Letters/ID: KNNN**

**Attn: Jesse Angelo**  
**Group Owner Hella TV**  
**Phone: 530-691-4017**  
**Email: jesse@hellaradio.com**

**Contact: Jason Fiore**  
**Phone: 413-998-1231**  
**Email: [jfiore@comarktv.com](mailto:jfiore@comarktv.com)**  
**Proposal Date: 08/25/21**  
**Validity: 90 days**

| Item                                     | Model#            | Description  | Qty | Unit Price USD    | Sell Total USD     |
|--|-------------------|--|-----|-------------------|--------------------|
| 1  | LPTV-5000-1500V3  | LPTV-5000-1500V3 - 1500 watt RMS, VHF ATSC digital air cooled transmitter      | 1   | \$43,290.00       | \$43,290.00        |
| 1.1                                      | Auxillary         | Lex Encoder, Rack and Installation Services                                    | 1   | \$28,020.20       | \$28,020.20        |
| 2  | Video Flow/Comark | IP-Based STL with path diversity between KNNN NOC and the DTV transmitter site | 1   | \$16,350.00       | \$16,350.00        |
| <b>ATSC 1.0 Solution</b>                 |                   |  |     | <b>Net Price:</b> | <b>\$87,660.20</b> |
| 3  | ATEME/Licenses    | ATEME Encoding Solution ATSC 3.0 capable                                       | 1   |                   |                    |
| 4  | FM Components     | Technologix FM Transmitter and Combiner  | 1   |                   |                    |
| <b>ATSC 3.0 System with FM component</b> |                   |  |     | <b>Net Price:</b> | <b>\$0.00</b>      |

**Payment and Delivery:**

|                       |                              |
|-----------------------|------------------------------|
| <b>Payment Terms:</b> | 50% dp/50% prior to shipment |
| <b>Incoterm 2010:</b> | Ex-Works                     |
| <b>Delivery:</b>      | 90-120 days ARO              |



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**General Conditions:**

This quotation contains proprietary information and it may not to be divulged to any third party without the expressed written consent of Hitachi Kokusai Electric Comark LLC

This Proposal and all sales hereunder shall be subject to the attached Sales Terms and Conditions. Although the customer may include or reference its standard forms for orders or other notices hereunder, such standard forms will be superseded by the terms and conditions of this proposal including the attached Sales Terms and Conditions and any term or condition in such standard forms that is inconsistent with or in addition to the terms and conditions of this Proposal shall this Proposal shall have no force or effect.

If this proposal is acceptable, please sign below and fax a copy to Hitachi Kokusai Electric Comark LLC (413) 998-1178. Please attach a copy of a tax exempt certificate (if applicable). Please reference this Proposal Number on all Purchase Orders.

**Credit Card Policy:**

If paying by credit card please note that Hitachi Kokusai Electric Comark LLC has a credit card policy. All prices quoted have a 3.25% cash discount built into the price. Any purchase made with a credit or debit card will not receive the cash discount. A non-cash discount adjustment will be applied to your credit card receipt. Refer to [comarktv.com/about-us/credit-card](http://comarktv.com/about-us/credit-card) for more details.

**Special Conditions:**

None.

**Purchaser's Acceptance**

Proposal # P#5243-LPTV1500WV3-08/25/2021

Purchaser's Name: Hella TV

Signature:

Title:

Date:

Bill To:

Ship To:



Hitachi Kokusai Electric Comark LLC Quotation  
P#5243-LPTV1500WV3-08/25/2021  
EQUIPMENT & SERVICES

All Prices In US Dollars

| ITEM                                      | QTY | PART NO.         | DESCRIPTION   | UNIT PRICE  | EXT. PRICE         |
|---|-----|------------------|---|-------------|--------------------|
|   |     |                  | Family - <i>LPTV-5000V3</i><br>Model - LPTV-5000-1500V3<br>DTV Standard ATSC – 8 VSB<br>DTV Channel - Customer to Supply<br>System Output 1500W after mask filter<br>Amplifier Type LDMOS<br>Input Voltage/Frequency 220 VAC / 60 Hz  |             |                    |
| 1   | 1   | LPTV-5000-1500V3 | <b>LPTV-5000-1500V3 - 1500 watt RMS, VHF ATSC digital air cooled transmitter</b><br><br>Inclusive features of the entire <i>LPTV-5000V3</i> product line are:<br>> Fully Solid State, 50VDC LDMOS devices<br>> Digital Adaptive Precorrector (DAP)<br>> Broadband VHF Power Amplifiers<br><br><b>Transmitter System Includes:</b><br><b>Exciter/Control/Amplifier containing:</b> | \$34,790.00 | <b>\$34,790.00</b> |
| 1.1.                                      | 1   |                  |   |             |                    |
| 1.1.1                                     | 1   | EXACT-V2         | > <b>COMARK'S VHF TV 8VSB Exciter containing:</b><br>> Reed Solomon Error Correction Coding<br>> Data Randomization<br>> Data Interleaving and Trellis coding<br>> Side Band Correction<br>> Digital Adaptive Precorrection DAP™<br>> ATSC 1.0, upgradeable to ATSC 3.0<br>> 14db Gain preamp<br>> TsolP License  | \$8,500.00  | <b>\$8,500.00</b>  |
| 1.1.2                                     | 1   |                  | <b>RF Power Amplifiers each with:</b><br>-- 1,500 Watts RMS output per amplifier chassis<br>-- Standard Input Voltage: 50VDC<br>-- Internal chassis cooling fans<br>-- 6RU Rack-Mount Chassis   |             |                    |
| 1.1.3                                     | 1   |                  | <b>Power Supply Units each with:</b><br>-- Embedded Micro-controller, front panel LCD screen<br>-- Control System Power Supply<br>-- Standard Input Voltage: 220V single phase<br>-- Standard Output Voltage: 50VDC<br>-- Internal chassis cooling fans<br>-- 3RU Rack-Mount Chassis  |             |                    |
| 1.1.4                                     | 1   |                  | <b>RF PA Combiner and interconnect cables</b>   |             |                    |
| 1.2                                       | 1   |                  | <b>RF Output Filter (FCC Mask Compliant)</b>  |             |                    |
| 1.3                                       | 1   |                  | <b>Instruction Book Set - pdf file</b>  |             |                    |
| 1.4                                       | 1   | S25              | <b>Standard Warranty</b><br><br>COMARK's standard warranty one (1) year from date of delivery. All other terms, conditions, and limitations shall apply.  |             |                    |
| <b>Total Transmitter Price Ex-Factory</b> |     |                  |   |             | <b>\$43,290.00</b> |



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EQUIPMENT & SERVICES

All Prices In US Dollars

| ITEM  | QTY | PART NO.    | DESCRIPTION  | UNIT PRICE  | EXT. PRICE         |
|-------|-----|-------------|--|-------------|--------------------|
| 2     |     | MISC-AUX    | <u>AUXILIARY EQUIPMENT &amp; SERVICES</u>  |             |                    |
| 2.1   | 1   |             | <b>TV Transmitter Installation and Proof of Performance:</b><br>Complete professional installation of the transmitter in customer's finished building.<br>Includes all mechanical and interconnect materials for standard installation.<br><br>Complete checkout and commissioning of the purchased COMARK digital transmitter system as described herein. Proof-of-Performance testing of transmitter will be performed into station load. One original set of the tests and measurements taken will be provided. | \$11,735.00 | <b>\$11,735.00</b> |
| 2.2   | 1   | Lex Encoder | 4 SD Encoding System - ATSC 1.0 Only   | \$11,360.00 | <b>\$11,360.00</b> |
| 2.2.1 | 1   | Lex Option  | LEX-OPT-GN PROG GUID INGEST  | \$2,011.20  | <b>\$2,011.20</b>  |
| 2.2.2 | 1   | Lex Option  | LEX-OPT-4SI - FAC OPT 4 CH STATION ID  | \$1,360.00  | <b>\$1,360.00</b>  |
| 2.2.3 | 1   | Lex Option  | LEX-OPT-TG FAC OPT, IP OUT GIG-E FEC   | \$1,554.00  | <b>\$1,554.00</b>  |

Total Auxiliary Price Ex-Factory

**\$28,020.20**



# Hitachi Kokusai Electric Comark Proposal

## Equipment & Services

All Prices In US Dollars

| ITEM                    | QTY | PART NO. | DESCRIPTION   | UNIT PRICE | EXTN'D PRICE |
|-------------------------|-----|----------|---|------------|--------------|
| Equipment at the studio |     |          |   |            |              |
| 1                       | 1   |          | 1 Outbound Bidirectional Path and 1 Outbound Single Path  | \$5,400.00 | \$5,400.00   |
| 1.1                     | 1   |          | VFH20202, DVA202 Performance Grade Appliances, 64x Streams / 256x SGs, 64x Tunnels, 200 Mb/s, 19", 1RU, Dual Power Supplies |            |              |
| 1.2                     | 1   |          | VFS10201, DVG Software  |            |              |
| 1.3                     | 3   |          | VFS88010, DVG Stream Gates (SG's)   |            |              |
| Equipment at TX Site    |     |          |   |            |              |
| 2                       | 1   |          | 1 Inbound Bidirectional Path and 1 Inbound Single Path  | \$5,400.00 | \$5,400.00   |
| 2.1                     | 1   |          | VFH20202, DVA202 Performance Grade Appliances, 64x Streams / 256x SGs, 64x Tunnels, 200 Mb/s, 19", 1RU, Dual Power Supplies |            |              |
| 2.2                     | 1   |          | VFS10201, DVG Software  |            |              |
| 2.3                     | 3   |          | VFS88010, DVG Stream Gates (SG's)   |            |              |
| Professional Services   |     |          |   |            |              |
| 3                       | 1   |          | Professional Services   | \$5,550.00 | \$5,550.00   |
| 3.1                     | 3   |          | VFP10004DVP, 12 months Platinum-3 Year Agreement-Price Per Year, Invoiced Annual Year 2 - 3                                 | \$1,620.00 | \$4,860.00   |
| 3.2                     | 1   |          | Estimated Shipping  | \$690.00   | \$690.00     |
| Total                   |     |          |   |            | \$16,350.00  |



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EQUIPMENT & SERVICES

All Prices In US Dollars

| ITEM                | QTY | PART NO. | DESCRIPTION | UNIT PRICE | EXT. PRICE |
|---------------------|-----|----------|-------------|------------|------------|
| Auxiliary Equipment |     |          |             |            |            |

AUXILIARY EQUIPMENT & SERVICES

|   |   |                   |   |            |                   |
|---|---|-------------------|---|------------|-------------------|
| 1 | 1 | ATEME             | <b>ATEME Encoding system</b><br>SRT - Support. Future Proof ATSC 3.0 capable system for encoding<br>- 3 SD Set up                         |            |                   |
| 2 | 1 | ATSC 3.0 Stack    | Enensys Equipment<br>>Gateway<br>>Router  |            |                   |
| 3 | 1 | ATSC 3.0 Licenses | Full Load of ATSC 3.0 Licenses<br>- ALP (Layer Link Protocol)<br>-Advanced Features License<br>- FEC (Forward Error Correction)<br>- SNMP | \$5,995.00 | <b>\$5,995.00</b> |

Total Auxiliary Price Ex-Factory

**\$5,995.00**



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| ITEM | QTY | PART NO. | DESCRIPTION          | UNIT PRICE | EXT. PRICE |
|------|-----|----------|----------------------|------------|------------|
|      |     |          | Auxillary Equipement |            |            |

AUXILIARY EQUIPMENT & SERVICES

|   |   |                    |   |            |                   |
|---|---|--------------------|---|------------|-------------------|
| 1 | 1 | FM Transmitter     | Technologix - 1kW FM transmitter - TXF 1000         | \$7,400.00 | <b>\$7,400.00</b> |
| 2 | 1 | American Amplifier | CIF combiner for ATSC 3.0 system and FM transmitter |            |                   |

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Total Auxiliary Price Ex-Factory

**\$7,400.00**