



NORTH AMERICAN PRICE LIST

MARCH 1, 2014

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ORBAN TERMS AND CONDITIONS OF SALE AND LIMITED WARRANTY

THESE TERMS AND CONDITIONS OF SALE AND LIMITED WARRANTY OF ORBAN SHALL BE GOVERNED BY AND CONSTRUED ACCORDING TO THE INTERNAL LAWS OF THE STATE OF ARIZONA, AND THE UNITED STATES OF AMERICA. THE RIGHTS AND OBLIGATIONS OF ALL PARTIES AND ALL PERSONS OR ENTITIES CLAIMING HEREUNDER SHALL NOT BE GOVERNED BY THE PROVISIONS OF THE 1980 U.N. CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF PRODUCTS. ANY ACTION OR PROCEEDING ARISING HEREUNDER MAY BE BROUGHT IN THE COURTS OF THE STATE OF ARIZONA OR THE U.S. DISTRICT COURT FOR ARIZONA.

1. **Conditions of Sale:** The terms and conditions of sale of the goods ("product") are as indicated below unless otherwise specifically stated by ORBAN in writing.
2. **Terms of Shipment:** All shipments are made F.O.B. factory, (for domestic sales), and Ex Works factory (for international sales) unless otherwise specifically stated by ORBAN in writing. Unless otherwise stated by BUYER, all shipments are made in the manner determined by ORBAN. The BUYER is responsible for payment of any and all taxes, customs, duty and similar charges.
3. **Prices:** Unless otherwise stated, all prices and amounts are payable in U.S. dollars. Prices are subject to adjustment prior to the time of delivery, should they be delayed by the BUYER. Prices do not include any sales, use, excise, or similar taxes. Any such tax applicable to products covered by ORBAN quotations, bid, proposal or resultant Purchase Order or Sales Order will be billed to and paid by the BUYER as separate and additional items on the invoice.
4. **Changes in Design:** ORBAN reserves the right to modify or change the products in whole or in part, at any time prior to delivery thereof, in order to include therein electrical or mechanical refinements deemed appropriate by ORBAN, but without liability to modify or change any product previously delivered, or to supply new products in accordance with earlier specifications.
5. **Purchase Order and Other Documents of Purchaser:** Changes of these Terms and Conditions of Sale and Limited Warranty initiated by the BUYER, such as on Purchase Orders, shall not be considered effective until mutual agreement has been in writing between BUYER and ORBAN concerning the effect of said changes on price, delivery, or other items and conditions of the Purchase Order or other document.
6. **Installation, etc.:** The prices quoted by ORBAN, unless otherwise specifically stated by ORBAN in writing, do not include installation. The products shall be installed by the BUYER, and the BUYER assumes all responsibility for installation and operation of the product as well as obtaining all permits, licenses, and certificates required by any regulatory agency or any other body for the installation and use of the products. The BUYER agrees to and shall indemnify and hold ORBAN harmless on account of any liability, loss, cost and expense arising from or connected with installation or operation of the products, and any failure to obtain any such permit, license or certificate.
7. **Terms of Payment:** Terms are from date of invoice. Specific terms are indicated on the front of the ORBAN invoice including discount, if any, allowed for earlier payment. BUYER shall pay ORBAN an interest charge of 1-1/2 % per month from date of shipment until paid in full, on all balances past due for more than thirty days. ORBAN reserves the right to require a deposit or pre-payment of the order prior to shipment.
8. **Delivery:** All shipments hereunder are subject to the U.S. Export Administration Act, as amended, the regulations thereunder and all other U.S. laws concerning exports. Damage and risk of loss of any kind or nature after delivery by ORBAN to the carrier shall be at the BUYER's sole risk and ORBAN shall not be obligated to procure or furnish insurance covering any shipment. Every reasonable effort will be made by ORBAN to affect delivery within the time specified on ORBAN Quotation or Purchase Order acknowledges pursuant to the BUYER's request for Quotation or Purchase Order acknowledgment, provided, however, that ORBAN shall not be liable for any delay or default due to causes beyond its control or due to the BUYER's fault or negligence. BUYER shall be liable and pay for any additional transportation charges incurred because of BUYER's request to use expedited means of shipment.
9. **Packaging:** All products shall be shipped in standard packaging, unless otherwise expressly provided on BUYER's Purchase Order. The cost of special packaging as may be required, shall be charged and invoiced separately and shall be paid by BUYER.
10. **Limited Warranty:** ORBAN LIMITED WARRANTY IS INCLUDED WITH EACH PRODUCT DELIVERED, AND EXCEPT AS THEREIN PROVIDED, NO OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO ANY PRODUCT SOLD HEREUNDER.
11. **Returns:** No product may be returned for credit without written return authorization from ORBAN. Place the Return Material Authorization Number (RMA#) on the outside of the box. Returned goods will be assessed a 15% restocking charge, plus the actual costs, if any, for refurbishing or packaging as ORBAN deems necessary. ORBAN assumes no responsibility for unauthorized returns. Authorized returns shall be shipped to ORBAN's Scottsdale, Arizona's factory delivered C.I.F. (pre-paid) or Delivered Duty Paid (for international sales). Any U.S. and other customs duty or related charges for returned products shall be BUYER's responsibility. Damage and risk of loss of any kind or nature respecting returns, shall be at the BUYER's sole risk.
12. **Limitations of Damages:** IN NO EVENT SHALL ORBAN BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, DIRECT, EXEMPLARY, SPECIAL OR SIMILAR DAMAGES TO PERSONS OR PROPERTY, NOR SHALL ORBAN LIABILITY IN ANY EVENT EXCEED THE PRICE OF THE SPECIFIC PRODUCT WHICH GAVE RISE TO THE CLAIM.
13. **Force Majeure:** ORBAN shall not be responsible for any delays in delivery due to strikes, lockout, riots, civil commotions, acts of nature, interruption or failure of electricity or telephone service, acts of god or government.
14. **Errors:** ORBAN reserves the right to correct clerical and typographical errors in any quotations, purchase orders, invoices, and product publications.



PROFESSIONAL USER NORTH AMERICAN PRICE LIST (USD)

MARCH 1, 2014

ORBAN FM PROCESSING

PART #		LIST
8600HD	OPTIMOD-8600HD DIGITAL MPX	\$13,990
8600FM	OPTIMOD-8600FM DIGITAL MPX	\$10,990
86FM-86HD-UPG	8600FM TO 8600HD	\$ 3,000
86FM-HD-MPX-UPG	8600FM MPX TO 8600HD MPX	\$ 795*
8600S-HD	OPTIMOD-8600S-HD DIGITAL	\$10,990
8600S-FM	OPTIMOD-8600S-FM DIGITAL	\$ 8,990
86S-FM-HD-UPG	8600S-FM TO 8600S-HD	\$ 2,000
5700HD	OPTIMOD-5700HD DIGITAL	\$ 6,990
5700FM	OPTIMOD-5700FM DIGITAL	\$ 5,990
57FM-57HD-UPG	5700FM TO 5700HD	\$ 1,000
57FM-86S-FM-UPG	5700FM TO 8600S-FM	\$ 3,000
57FM-86S-HD-UPG	5700FM TO 8600S-HD	\$ 5,000
57HD-86S-HD-UPG	5700HD TO 8600S-HD	\$ 4,000
5500	OPTIMOD-5500FM DIGITAL	\$ 3,990
5518	OPTIMOD-5518FM LIMITER	\$ 3,490
8500-16S-UPG	8500FM 16 SECOND DELAY	\$ 950
85FM-85HD-UPG	8500FM TO 8500HD	\$ 1,000
85FM-86FM-UPG	8500FM TO 8600FM	\$ 2,000
85FM-86HD-UPG	8500FM TO 8600HD	\$ 3,000
85HD-86HD-UPG	8500HD TO 8600HD	\$ 3,000

ORBAN AM PROCESSING

PART #		LIST
9400	OPTIMOD-AM 9400	\$ 7,990
9300	OPTIMOD-AM 9300	\$ 4,950

ORBAN TV / STUDIO PROCESSING

PART #		LIST
8685	OPTIMOD-TV 8685 SURROUND SOUND	\$19,950
8685-OPT1	8685 SURROUND SOUND, ENCODER	\$23,450
8685-OPT2	8685 SURROUND SOUND, DECODER	\$24,450
8685-OPT3	8685 SURROUND SOUND, ENCODER&DECODER	\$27,950
6585	OPTIMOD-TV 6585 SURROUND SOUND	\$14,950
6585-OPT1	6585 SURROUND SOUND, ENCODER	\$18,450
6585-OPT2	6585 SURROUND SOUND, DECODER	\$19,450
6585-OPT3	6585 SURROUND SOUND, ENCODER&DECODER	\$22,450

ORBAN MULTIPLE-PURPOSE PROCESSING

Radio Processing	HD Pprocessing	TV/Studio Processing
PART #		LIST
6300	OPTIMOD-DAB 6300	\$ 5,490
1101	OPTIMOD-PC 1101e	\$ 1,790
1101e	OPTIMOD-PC 1101	\$ 1,790

STREAMING MEDIA ENCODERS FOR PC

PART #		LIST
1010 PE	OPTICODEC-PC 1010 PE	\$ 645
1010-PE-UPG-3	UPGRADE 1010PE VER. 3.8 W MP3	\$ 295
1211e	OPTICODEC-PC 1211e	\$ 2,345
1211	OPTICODEC-PC 1211	\$ 2,345
1511	OPTICODEC-PC 1511	\$ 2,890
1511e	OPTICODEC-PC 1511e	\$ 3,390
OptiEXP	PCle EXPANSION CHASSIS	\$ 2,290
1511EXP	OPTICODEC-1511EXP	\$ 5,390

STREAMING FILE ENCODERS FOR PC

PART #		LIST
1020-FE	OPTICODEC-PC 1020 FE (ENTERPRISE)	\$ 999

AUDIO CODEC PRODUCTS

PART #		LIST
OC7700	OPTICODEC 7700E/D MPX	\$ 3,990
OC7700	OPTICODEC 7700E	\$ 1,995
OC7700	OPTICODEC 7700D	\$ 1,995
RACKMNT	MOUNTING 19" METAL RACK	\$ 45
OC7600	OPTICODEC 7600	\$ 4,195
OC7400-IMD4TWO	ISDN INTERFACES FOR 7400 & 7600	\$ 595

OPTICODEC CABLE ACCESSORY

PART #		LIST
1101-CBLXLR	PRE-WIRED CABLE OPTION FOR 1101	\$ 110



OPTIMOD-FM 8600HD DIGITAL MPX

FM/HD top of the line function with MX limiter, large display, and digital MPX.

Part Number **8600HD**

Pro User Net Price (USD) **\$13,990**

Orban's most advanced FM / Digital Radio processor with two times the digital processing power of its predecessor — cleaner, brighter and louder than previously possible. A revolutionary new peak limiter technology provides lower distortion, greater transient punch, and almost 3 dB more HF energy than its predecessor. Additional features include windowed gated dual-band AGC, stereo enhancement, parametric EQ, large color LCD, advanced processing controls and an Orban-exclusive baseband processor providing all the advantages of composite clipping without the usual degradation of stereo or RDS/RBDS coverage. The digital processing chain is driven by the output of the AGC. Both the FM analog and digital radio processing chains have independently adjustable equalizers, multi-band compression (5-band or 2-band), ultra low latency five-band processing structures with separate controls for music and speech programming, automatically detected and peak limiters. The digital chain, whose audio bandwidth is adjustable from 10 kHz to 20 kHz, is suited for processing HD Radio, DRM, DAB, FMXtra, netcasts, and other transmission chains, that do not employ pre-emphasis. Digital I/O included. Sample rates automatically selected for AES/EBU input and digital sync input: 32, 44.1, 48, 88.1, and 96 kHz. Inputs: AES/EBU, digital sync and electronically balanced stereo analog (XLR). Two analog stereo encoder composite outputs with independent output level adjustments (BNC), and one 192 kHz AES3 composite output (XLR). Four SCA inputs (BNC); two mixed into the analog composite outputs and two mixed into the digital composite output. SSB stereo encoder mode available. Stereo pilot tone can be frequency-locked to 10 MHz, wordclock, or AES3 input. Output sample rates selected in software: 32, 44.1, 48, 88.1, and 96 kHz. Outputs: AES/EBU, electronically balanced and floating stereo analog (XLR). GPIO optically-isolated remote control interface (DB25), two RS-232 interfaces (DB9). 100 Mb/sec Ethernet interface (RJ45) supports remote control and SNMP. Included PC Remote software runs on Windows® XP, Vista, and 7/8. Pre-emphasis 50µs or 75µs.3RU. 36 lbs./16.3 kg.



OPTIMOD-FM 8600FM DIGITAL MPX

FM top of the line function with MX limiter, large display, and digital MPX.

Part Number **8600FM**

Pro User Net Price (USD) **\$10,990**

For analog FM transmission only. Identical to the OPTIMOD-8600-HD except that it does not offer a digital radio processing chain. Upgradeable to 8600-HD via purchased upgrade kit without removing unit from rack.



OPTIMOD-8600FM TO OPTIMOD-8600HD

Part Number **86FM-86HD-UPG**

Pro User Net Price (USD) **\$ 3,000**

The HD upgrade option can be field-installed at any time to upgrade to full Optimod-FM 8600 / HD functionality.



OPTIMOD-8600FM OR HD TO DIGITAL MPX

Part Number **8FM-HD-MPX-UPG**

Pro User Net Price (USD) **\$ 795***

For units sold through November 1, 2013, the MPX upgrade option can be field-installed at any time to upgrade to full Optimod-FM 8600 or HD MPX functionality. Not available on "S" models.

*Upgrade no charge for units purchased after November 1, 2013.





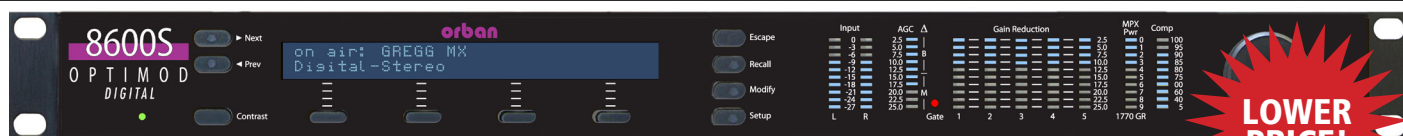
OPTIMOD-FM 8600S-HD DIGITAL PROCESSOR

FM/HD top of the line function with MX limiter and compact 1RU spacing.

Part Number **8600S-HD**

Pro User Net Price (USD) **\$10,990**

Cool-running single rack unit version of Optimod-FM 8600: Orban's most advanced Digital Radio processor. "MX" peak limiter technology provides lower distortion, greater transient punch, and almost 3 dB more HF energy than its predecessor. Additional features include window-gated dual-band AGC, stereo enhancement, parametric EQ, a 2x40-line LCD display, and an Orban-exclusive baseband processor that provides all the advantages of composite clipping without the usual degradation of stereo or RDS/RBDS coverage. Included PC Remote Software exposes advanced processing controls. The digital processing chain is driven by the output of the AGC. Both the FM analog and digital radio processing chains have independently adjustable equalizers, multi-band compression (5-band or 2-band), ultra low latency five-band processing structures with separate controls for music and speech programming, and peak limiters. The digital chain, whose audio bandwidth is adjustable from 10 kHz to 20 kHz, is suited for processing HD Radio, DRM, FMXtra, netcasts, and other transmission chains that do not employ pre-emphasis. It controls peaks via a "true-peak" oversampled look-ahead limiter and offers BS.1770 loudness control. 32, 44.1, 48, 88.1, and 96 kHz input and output sample rates are supported from the two AES3 digital inputs and two AES3 outputs. Two stereo encoder composite outputs with independent output level adjustments (BNC). Stereo pilot tone can be frequency-locked to 10 MHz, wordclock, or AES3 input. SSB stereo encoder mode available. GPIO optically-isolated remote control interface (DB25), two RS-232 interfaces (DB9). 100 Mb/sec Ethernet interface (RJ45) supports remote control and SNMP. Pre-emphasis 50µs or 75µs. 1RU. 10 lbs./4.6 kg.



OPTIMOD-FM 8600S-FM DIGITAL PROCESSOR

FM top of the line function with MX limiter and compact 1RU spacing.

Part Number **8600S-FM**

Pro User Net Price (USD) **\$ 8,990**

For analog FM transmission only. Identical to the OPTIMOD-8600S-HD except that it does not offer a digital radio processing chain. Upgradeable to 8600S-HD via purchased upgrade kit without removing unit from rack.

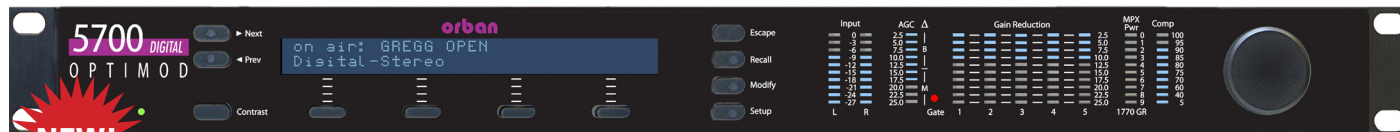


OPTIMOD-8600S-FM TO OPTIMOD-8600S-HD

Part Number **8600SFM-8600SHD-UPG**

Pro User Net Price (USD) **\$ 2,000**

The HD upgrade option can be field-installed at any time to upgrade to full Optimod-FM 8600S / HD functionality.



NEW!

OPTIMOD-FM 5700HD DIGITAL PROCESSOR

Mid-priced FM/HD full function 5 band processor with compact 1RU spacing.

Part Number **5700HD**

Pro User Net Price (USD) \$ **6,990**

Processing equivalent to Optimod-FM 8500 in a cool-running 1U package at a more affordable cost. Available in FM-only and FM+HD configurations. Versatile remote control capabilities, including SNMP. Analog and digital I/O available (composite output is analog-only), including digital ratings encoder loop-through connection to maximize audio level into the encoder. Wordclock/10 MHz sync reference input allows pilot tone to be synced to GPS-based reference, facilitating use in single-frequency networks. SSB stereo encoder mode available. Upgradeable to 8600S-HD via purchased upgrade kit without removing unit from the rack.



NEW!

OPTIMOD-FM 5700FM DIGITAL PROCESSOR

Mid-priced FM full function 5 band processor with compact 1RU spacing.

Part Number **5700FM**

Pro User Net Price (USD) \$ **5,990**

Identical to the OPTIMOD-FM 5700HD except for the deletion of the digital radio processing chain. Upgradeable to 5700 -HD, 8600S-FM or 8600S-HD via purchased upgrade kit without removing unit from the rack.



OPTIMOD-5700FM TO OPTIMOD-5700HD

Part Number **57FM-57HD-UPG**

NEW!

Pro User Net Price (USD) \$ **1,000**

The HD upgrade option can be field-installed at any time to upgrade to full Optimod-FM 5700 / HD functionality.



OPTIMOD-5700FM TO OPTIMOD-8600S-FM

Part Number **57FM-86S-FM-UPG**

NEW!

Pro User Net Price (USD) \$ **3,000**

The FM upgrade option can be field-installed at any time to upgrade to full Optimod-FM 8600S / FM functionality.



OPTIMOD-5700FM TO OPTIMOD-8600S-HD

Part Number **57FM-86S-HD-UPG**

NEW!

Pro User Net Price (USD) \$ **5,000**

The HD upgrade option can be field-installed at any time to upgrade to full Optimod-FM 8600S / HD functionality.



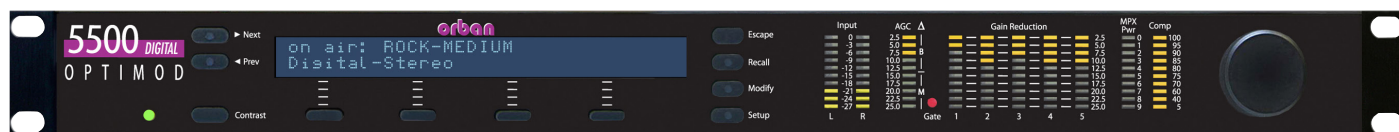
OPTIMOD-5700HD TO OPTIMOD-8600S-HD

Part Number **57HD-86S-HD-UPG**

NEW!

Pro User Net Price (USD) \$ **4,000**

The HD upgrade option can be field-installed at any time to upgrade to full Optimod-FM 8600S / HD functionality.



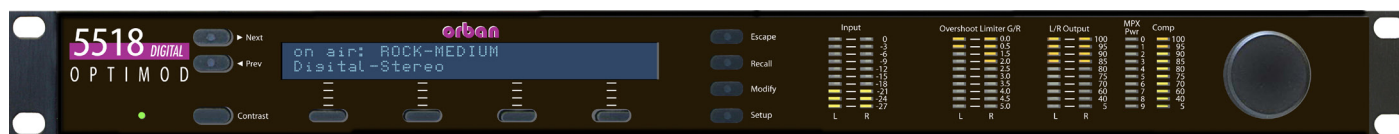
OPTIMOD-FM 5500 DIGITAL PROCESSOR

Full function 5 band processor with compact 1RU spacing.

Part Number **5500**

Pro User Net Price (USD) \$ **3,990**

Optimod-FM 5500 puts coveted five-band and two-band Optimod processing as well as a premium-quality stereo encoder into a single rack unit package and brings them to you at the most affordable price ever. The 5500 features three processing structures: Optimum Five-Band (or "Multiband"; 15 ms delay) for a consistent, "processed" sound, free from undesirable side effects, Ultra-Low-Latency Five-Band (5 ms delay) for environments where talent monitors live off-air and they object to the delay of Optimum Five-Band, and Two-Band (19 or 23 ms delay) for a transparent sound that preserves the frequency balance of the original program material. The digital stereo encoder includes Orban's patented "Half-Cosine Interpolation" composite limiter and an ITU-R 412 multiplex power controller. In stand-alone mode, the stereo encoder additionally offers a dual-mode composite (Orban's patented "Half-Cosine Interpolation" composite limiter or a hard clipper with overshoot compensation and band limiting to 55 kHz) limiter, a left/right domain overshoot limiter (ideal for compressed links), an adjustable phase-linear lowpass filter, and a 64 kHz base sample rate. Pre-emphasis 50 μ s or 75 μ s. Digital I/O included. Inputs: AES/EBU and electronically balanced stereo analog (XLR). Sample rates automatically selected for AES/EBU input: 32, 44.1, 48, 88.1, and 96 kHz. Two SCA inputs (BNC) with adjustable sensitivity 10 MHz reference input allows the pilot tone and output sample frequency to be locked to a high-precision reference like GPS. Output sample rates selected in software: 32, 44.1, 48, 88.1, and 96 kHz. Outputs: AES/EBU, electronically balanced and floating stereo analog (XLR). Two stereo encoder composite outputs (BNC). Remote control interface (DB25), RS-232 interface (DB9). 100 Mb/sec Ethernet interface (RJ45) supports remote control and SNMP. Included PC Remote software runs on Windows® XP, Vista, and 7/8. 1RU. 10 lbs/4.6kg.



OPTIMOD-FM 5518 LIMITER

Part Number **5518**

Pro User Net Price (USD) \$ **3,490**

A stand-alone stereo encoder offering a dual-mode composite limiter (Orban's patented "Half-Cosine Interpolation" composite limiter or a hard clipper with overshoot compensation and band-limiting to 55kHz), an ITU-R 412 multiplex power controller, a left/right domain overshoot limiter (ideal for compressed links), an adjustable phase-linear lowpass filter, and a 64 kHz base sample rate. Pre-emphasis 50 μ s or 75 μ s. Inputs: AES3 digital and electronically balanced stereo analog (XLR). Sample rates automatically selected for AES/EBU input: 32, 44.1, 48, 88.1, and 96 kHz. Two SCA inputs (BNC) with adjustable sensitivity. 10 MHz reference input allows the pilot tone and output sample frequency to be locked to a high-precision reference like GPS. Output sample rates selected in software: 32, 44.1, 48, 88.1, and 96 kHz. Outputs: Two stereo encoder composite outputs (BNC). Remote control interface (DB25), RS-232 interface (DB9). 100 Mb/sec Ethernet interface (RJ45) supports remote control and SNMP. Included PC Remote software runs on Windows® XP, Vista and 7/8. 1RU. 10 lbs/4.6kg.



OPTIMOD-FM 8500 HD or FM

Upgrades available, see options listed below.



OPTIMOD-8500 FM OR HD 8 SECOND DELAY TO 16 SECOND DELAY

Part Number **8500-16S-UPG**

Pro User Net Price (USD) \$ **950**

Upgraded DSP board for Optimod 8500 FM / HD Digital.



OPTIMOD-8500FM TO OPTIMOD-8500HD

Part Number **85FM-85HD-UPG**

Pro User Net Price (USD) \$ **1,000**

The HD upgrade option can be field-installed at any time to upgrade to full Optimod-FM 8500 / HD functionality.



OPTIMOD-8500FM TO OPTIMOD-8600FM

Part Number **85FM-86FM-UPG**

Pro User Net Price (USD) \$ **2,000**

The FM upgrade option can be field-installed at any time to upgrade to full Optimod-FM 8600 / FM functionality.



OPTIMOD-8500FM TO OPTIMOD-8600HD

Part Number **85FM-86HD-UPG**

Pro User Net Price (USD) \$ **3,000**

The HD upgrade option can be field-installed at any time to upgrade to full Optimod-FM 8600 / HD functionality.



OPTIMOD-8500HD TO OPTIMOD-8600HD

Part Number **85HD-86HD-UPG**

Pro User Net Price (USD) \$ **3,000**

The HD upgrade option can be field-installed at any time to upgrade to full Optimod-FM 8600 / HD functionality.



ORBAN AM PROCESSING



OPTIMOD-AM 9400 DIGITAL PROCESSOR

Part Number **9400**

Pro User Net Price (USD) \$ **7,990**

Processor for stereo AM and HD/netcasting also offers Orban's best audio quality for mono AM. Combined AM analog and digital radio processing. Digital radio can be used for HD Radio, DAB/DAB+, netcasting and other digital services. Analog AM and digital radio processors are independent except for common AGC and stereo enhancer. Both processing channels are stereo. Analog AM supports C-QUAM®. Analog bandwidth adjustable 4.5 to 9.5 kHz (NRSC). Digital bandwidth: 15 kHz. Inputs include one analog stereo pair and one AES3 digital. Outputs include two analog stereo pairs and two AES3 digital. Each output's level and source feed can be set independently. Sources include the AM processed signal, the digital radio processed signal, or low-delay monitor signal. Digital I/O supports 32, 44.1, 48, 88.2, and 96 kHz sample rates. Remote control via Ethernet, RS232 serial, and GPI contact closure. Included PC Remote software runs on Windows® 2000/ XP/Vista/7/8. Clock-based automation with automatic Internet time sync is built in. 2RU 22 lbs/10.0kg.



OPTIMOD-AM 9300 DIGITAL PROCESSOR

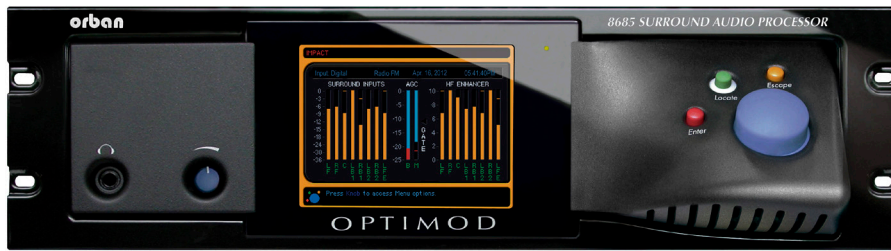
Part Number **9300**

Pro User Net Price (USD) \$ **4,950**

Mono AM processor delivers high-quality FM-like sound. Analog bandwidth adjustable 4.5 to 9.5 kHz (NRSC). Inputs include one analog pair and one AES3 digital. Two analog monophonic outputs and one AES3 output can accommodate as many as three transmitters. Each output's level and source feed can be set independently. Sources include the AM processed signal, or low-delay monitor signal. Digital I/O supports 32, 44.1, 48, 88.2, and 96 kHz sample rates. Remote control via Ethernet, RS232 serial, and GPI contact closure. Included PC Remote software runs on Windows® 2000/XP/Vista/7/8. Clock-based automation with automatic is built in. 1RU 19 lbs/8.7kg.



ORBAN TV / STUDIO PROCESSING



OPTIMOD-TV 8685 SURROUND SOUND

5.1 OptiMix is now standard!

Part Number **8685**

Pro User Net Price (USD) **\$19,950**

Automatic loudness controller for simultaneous control of four stereo programs and one surround program. 5.1 OptiMix is now standard. Surround processing can use one 2.0 processor to create a loudness-controlled and peak-controlled downmix output that can drive an analog TV transmitter. ATSC A/85 (CALM Act) and EBU R 128 compliant via third-generation CBS Loudness Controller. Includes CBS and BS.1770-2 loudness meters. Automatic dialog intelligibility control. 3G HD-SDI and AES3id I/O. SDI provides video delay to match processing delay, ensuring correct AV sync. Front-panel headphone output. Seamless switching of audio, video, and metadata between loudness control and pass-through modes. Color GUI on active-matrix quarter-VGA display allows full front-panel adjustment of all setup and processing parameters. Dual-redundant universal power supplies. Three units high.



OPTIMOD-TV 6585 SURROUND SOUND

5.1 OptiMix is now standard!

Part Number **6585**

Pro User Net Price (USD) **\$14,950**

5.1 OptiMix is now standard. Surround processing includes a loudness-controlled and peak-controlled downmix output that can drive an analog TV transmitter. ATSC A/85 (CALM Act) and EBU R 128 compliant via third-generation CBS Loudness Controller. Includes CBS and BS.1770-2 loudness meters. Automatic dialog intelligibility control. 3G HD-SDI provides video delay to match processing delay, ensuring correct AV sync. Seamless switching of audio, video, and metadata between loudness control and pass-through modes. Dual-redundant universal power supplies. Two rack units high.



OPTIMOD-TV 8685 OR OPTIMOD-TV 6585 OPTION 1 DOLBY E DECODER

Part Number **8685-OPT1**

Pro User Net Price (USD) **\$23,450**

Part Number **6585-OPT1**

Pro User Net Price (USD) **\$18,450**

HD-SDI input/output interface module with Dolby E decoder. Has all the features of base configuration but also includes a Dolby E decoder that can accept a Dolby E bitstream from the HD-SDI or AES3id inputs and decode it to PCM for application to the 8685 audio processing or for direct output to AES3id and the HD-SDI output. Supports Dolby E metadata received through HD-SDI and RS485 serial connections.



OPTIMOD-TV 8685 OR OPTIMOD-TV 6585 OPTION 2 DOLBY E ENCODER

Part Number **8685-OPT2**

Pro User Net Price (USD) **\$24,450**

Part Number **6585-OPT2**

Pro User Net Price (USD) **\$19,450**

HD-SDI input/output interface module with Dolby E encoder. Has all features of base configuration but additionally can encode into a Dolby E bitstream the PCM output of the 8685 processing or PCM received from the HD-SDI or AES3id inputs. Can emit Dolby E metadata from an RS485 serial port and through HD-SDI.



OPTIMOD-TV 8685 OR OPTIMOD-TV 6585 OPTION 3 DOLBY E ENCODER AND DECODER

Part Number **8685-OPT3**

Pro User Net Price (USD) **\$27,450**

Part Number **6585-OPT3**

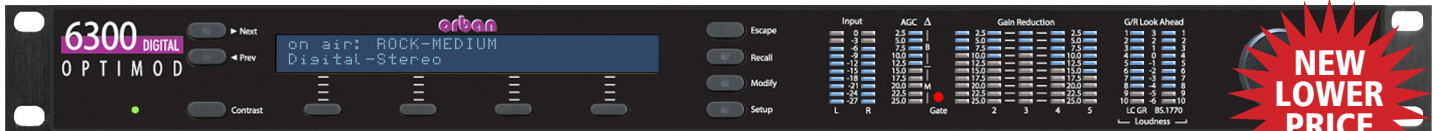
Pro User Net Price (USD) **\$22,450**

HD-SDI input/output interface module with Dolby E encoder and decoder. Has all features of base configuration but additionally can decode and encode into a Dolby E bitstream the PCM output of the 8685 processing or PCM received from the HD-SDI or AES3id inputs. Supports Dolby E metadata through HD-SDI and RS485 serial ports.



ORBAN MULTIPLE-PURPOSE PROCESSING

- ☒ Radio Processing ☒ HD Processing ☒ Television Processing ☒ Studio Processing



**NEW
LOWER
PRICE**

OPTIMOD-DAB 6300

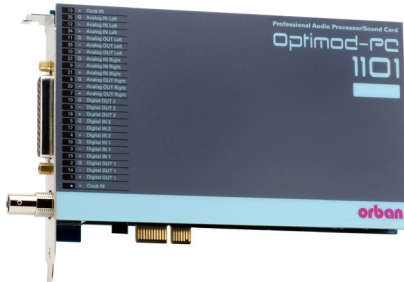
The OPTIMOD 6300 is a high quality, multi-purpose stereo audio processor for digital radio, analog/digital television, netcasts, STL protection, audio production, and digital mastering.

Part Number **6300**

Pro User Net Price (USD) \$ **4,490**

The versatile 6300 contains a stereo enhancer, AGC, equalizer, phase-linear multiband compressor/limiter with either two or five bands, and two independent stereo look-ahead peak limiters. It can be used as a full audio processor, STL protection limiter, headphone processor, and more, all simultaneously. 20 kHz audio bandwidth and 48 kHz internal sample rate. Peak limiting can be preemphasized at either 50 or 75 microseconds or "flat" allowing the 6300 to protect pre-emphasized analog STLs or to process for analog television. For video applications, broadcasters can activate the 6300's included CBS Loudness Controller™ to prevent audience irritation and tune-outs caused by loud commercials and to ensure CALM Act compliance. Includes CBS Loudness Meter™ and ITU-R BS.1770-2 Loudness Meter. The 6300 is a dialnorm-aware, allowing easy incorporation into Dolby Digital™ transmission paths. The 6300 incorporates Orban's PreCode™ technology, which pre-processes audio to minimize audible artifacts in low bitrate codecs such as the iBiquity HDC used in HD Radio™. Several of the 6300's presets exploit this technology to provide "plug and play" processing. Included PC Remote software runs on Windows® 2000/XP/Vista/7/8. 1RU 16 lbs./7.25 kg.

- ☒ HD Radio Processing ☒ Television Processing ☒ Studio Processing



OPTIMOD-PC 1101e

Optimod 8500HD-Class Stereo Processing, PCIe Card.
Microsoft Windows® Audio Processing Card for Professional Broadcasters/Netcasters.

Part Number **1101e**

Pro User Net Price (USD) \$ **1,790**

PCIe card for Windows® 2003, 2008, XP Pro, Vista and 7/8. CBS Loudness Controller™ and Loudness Meter™ included. The 1101e is dialnorm-aware, allowing easy incorporation into Dolby Digital™ transmission paths. The 1101e is also a high-quality sound card with analog I/O, AES/EBU digital output and two mixing AES/EBU digital inputs, either of which can receive sync. Includes WAVE drivers that allow the card to send and receive WAVE streams from the host computer and to mix these with the external analog and digital inputs. The 1101e can be configured as 2 sound devices, ideal for ad insertion. Multiple cards can be installed in host computer, limited only by CPU resources and the number of available PCIe slots. It readily drives streaming encoders running on the host. Includes PCIe card, application software, and user documentation. Internal sample rate: 48 kHz.

- ☒ HD Radio Processing ☒ Television Processing ☒ Studio Processing



OPTIMOD-PC 1101

Optimod 8500HD-Class Stereo Processing, PCI Card.
Microsoft Windows® Audio Processing Card for Professional Broadcasters/Netcasters.

Part Number **1101**

Pro User Net Price (USD) \$ **1,790**

Functions identically to the OPTIMOD-PC 1101 but has a PCI connector.



ORBAN STREAMING MEDIA ENCODERS FOR PC



OPTICODEC-PC 1010PE

Part Number **1010-PE**

Pro User Net Price (USD) \$ **645**

Orban's industry leading Windows enterprise streaming AAC/HE-AAC and MP3 codec. Used by the world's leading broadcast, satellite and IP networks. Addresses all MP4 capable servers including Icecast/Shoutcast, Darwin, Real and now with true RTMP, Adobe and Wowza servers. Addresses iPhone, 3G, smartphones and 98% of all PC's, including Mac's and Linux, on the Internet. Must be used in conjunction with the Orban Optimod PC 1100/1101/1101e.



OPTICODEC-PC 1010PE VERSION 3.8, NOW INCLUDES MP3

Part Number **1010-PE-UPG-3**

Pro User Net Price (USD) \$ **295**

Software upgrade from 1010-PE to 1010-PE Version 3.8.



OPTICODEC-PC 1211 or 1211e

Part Number **1211 or 1211e**

Pro User Net Price (USD) \$ **2,345**

This package contains the OPTICODEC-PC 1010 PE MPEG-4 AAC/HE-AAC encoding software and an OPTIMOD-PC 1101 PCI or PCIe card.



Part Number **1511**

OPTICODEC-PC 1511

Pro User Net Price (USD) \$ **2,890**

This package contains an Atom Processor, PCI only (no PCIe), 1RU Windows 7 Pro based appliance with an Opticodec-PC 1211. The 1511 offers front panel and PC Remote control and setup for plug and play operation.



Part Number **1511e**

OPTICODEC-PC 1511e

Pro User Net Price (USD) \$ **3,390**

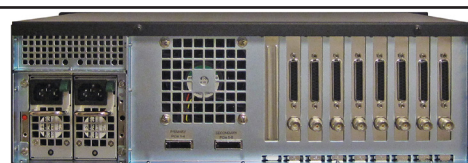
This package contains an Dell R210 II, an Intel I3 Processor, PCIe only, 1U rack mount PC, Windows 7 Pro with an Opticodec 1211e included.



PCIe EXPANSION CHASSIS

Part Number **OptiEXP**

Expansion chassis only, can hold up to 8 x 1101e/1211e PCIe cards. Includes no cards, each card is priced additionally.



Pro User Net Price (USD) \$ **2,290**



OPTICODEC-PC 1511eXP

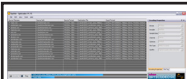
Part Number **1511eXP**

Pro User Net Price (USD) \$ **5,390**

This package contains a 1511e and the PCIe Expansion Chassis. One PCIe 1211e card included. 2-8 cards are possible at extra cost. Not available with the 1511.



ORBAN STREAMING FILE (PODCASTING) ENCODERS FOR PC



OPTICODEC-PC 1020FE ENTERPRISE

Part Number **1020-FE**

Pro User Net Price (USD) \$ **999**

1020 FE ENTERPRISE, AAC/HE-AAC(aacPlus) file encoder featuring batch encoding capabilities and 3GP hinting included.



ORBAN AUDIO CODECS



OPTICODEC 7700E MPX ENCODER AND OPTICODEC 7700D MPX DECODER Available as a system.

Part Number **OC7700E/D**

Pro User Net Price (USD) \$ **3,990**

The Opticodec 7700E MPX Encoder and Opticodec 7700D MPX Decoder has been designed to send the Optimod-FM (studio based) Composite Baseband signal over IP to avoid loss of quality on the transmission between studio and FM Transmitterbase to feed directly into the transmitter's FM exciter with no intervening processing. The signal is transmitted between the Opticodec 7700E and Opticodec 7700D over IP with use of UDP or TCP. To ensure highest reliability, each Opticodec 7700 has two 100 MBit/s Ethernet interfaces – one for the control LAN and one for the IP composite signal transmission packets. This allows the audio to run on a dedicated LAN, to maximizing throughput capacity. The Opticodec 7700E carries the Optimod-FM encoded stereo signal, the stereo pilot tone, and subcarriers like RDS that may have been applied to the studio based Optimod-FM 's subcarrier inputs. The Opticodec 7700D does have the same composite mixing functionality as the Optimod-FM. That means, that there are also two SCA Inputs and also two Composite Baseband Outputs available.

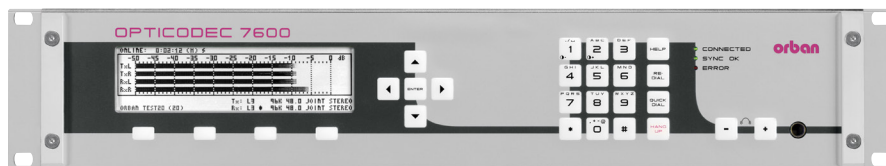


MOUNTING 19" METAL RACK

Part Number

Pro User Net Price (USD) \$ **45**

Mounting rack for Opticodec 7700 Encoder and Decoder system.

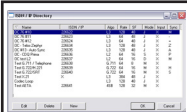


OPTICODEC 7600 AUDIO CODEC

Part Number **OC7600**

Pro User Net Price (USD) \$ **4,195**

The Opticodec 7600, designed and engineered by our German engineering team in Ludwigsburg, is the next step forward in audio transmission using ISDN - X.21 or V.35 and TCP/IP. The Orban Opticodec 7600 is the natural successor of one of the most used codecs the MusciTAXI. The Opticodec 7600 is an extremely powerful codec using the latest Motorola DSP (we do not use PC processors). With our unique Automatic Codec Detect function, you do not have to worry about what codec is on the other side.



ISDN-BR1 INTERFACE

Part Number **OC7400-IMD4**

Pro User Net Price (USD) \$ **595**

ISDN-BR1 interface, which can be added to the 7400 or 7600 to provide two ISDN interfaces.



ORBAN OPTICODEC CABLE ACCESSORY



PRE-WIRED CABLE OPTION FOR 1101 I/O INTERFACE (TERMINATED)

Part Number **1101-CBLXLR**

Pro User Net Price (USD) \$ **110**

6 feet long, terminated in XLR connectors with additional BNC sync.