



**BLONDER  
TONGUE**  
LABORATORIES, INC.

# DHDP SERIES

## DIGITAL HIGH-DEFINITION PROCESSOR

1x 8VSB ▶ 1x IF ▶ 1x 8VSB

DHDP (Digital High-Definition Processor) is a two-module system consisting of one down-converter module and one up-converter module. The down-converter accepts one 8VSB (digital off-air) input in the 54-864 MHz range and delivers one output in IF (Intermediate Frequency) format. The up-converter accepts one IF input and delivers one output in 8VSB format.

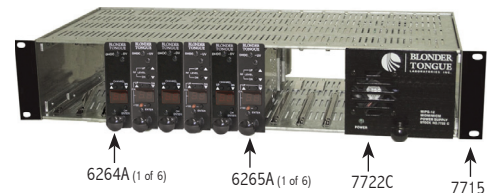


### FEATURES

- Agile Broadcast (UHF, VHF) and CATV (Standard, HRC, and IRC) channel assignments in the 54-864 MHz range
- Compatible with Digital TV and High-Definition TV applications
- Compact design allows for deployment of six Combo modules in 2RU rack space

### ORDERING INFORMATION

Model	Stock #	Description
DHDC-DV	6264A	Digital TV & High-Definition TV Down-converter module
DHDC-UV	6265A	Digital TV & High-Definition TV Up-converter module
DHDP-V	6266B	Combo modules (6264A + 6265A)
MIRC-12V	7715	Rack Chassis (holds up to 6 combo modules)
MIPS-12C	7722C	110 VAC/60 Hz power supply (one per chassis)



# SPECIFICATIONS

## DOWN-CONVERTER

<b>Connectors</b>	<b>8VSB Input:</b> "F" Female <b>IF Output:</b> "F" Female
<b>Input</b>	<b>Format:</b> 8VSB (ATSC Digital Television A/53E) <b>Frequency Range:</b> 54-864 MHz (VHF Ch. 2-13; UHF Ch. 14-69) <b>Operating Level Range:</b> -20 to +25 dBmV <b>Installation Input Range:</b> -15 to +20 dBmV (any undesired Ch. < +25 dBmV) <b>Max undesired to desired Ch. ratio:</b> < +25 dBc <b>Max adjacent to desired Ch. ratio:</b> < +15 dBc
<b>Output</b>	<b>Format:</b> IF (Intermediate Frequency) <b>Frequency:</b> 44 MHz center <b>Output Level (AGC):</b> +30 dBmV (-20 to +25 dBmV input) <b>Phase Noise:</b> -90 dBc/Hz (@ 10 kHz offset)

## UP-CONVERTER

<b>Connectors</b>	<b>IF Input:</b> "F" Female <b>RF Output:</b> "F" Female
<b>Input</b>	<b>Format:</b> 8VSB <b>Frequency:</b> 44 MHz center (IF - Intermediate Frequency) <b>Input Level:</b> +30 dBmV
<b>Output</b>	<b>Format:</b> CATV (Standard, IRC, HRC) and Broadcast (VHF, UHF) <b>Frequency:</b> 54-864 MHz <b>Frequency Tolerance:</b> ±5 kHz <b>Output Level:</b> +45 dBmV <b>Level Adjust Range:</b> +33 to +47 dBmV <b>Channel Flatness:</b> 1 dB <b>Spurious Output:</b> -60 dB (50 to 1000 MHz) <b>C/N Ratio (In Channel-Digital):</b> -60 dB (5.5 MHz bandwidth; +45 dBmV Output) <b>Broadband Noise:</b> -71 dBc (5.5 MHz BW, +45 dBmV Output) <b>Phase Noise:</b> -95 dBc (@ 10 kHz offset) <b>Impedance:</b> 75 Ω <b>Return Loss:</b> 12 dB

## GENERAL

<b>Dimensions (W x D x H)</b>	<b>Each Module:</b> 1.15 x 7.5 x 3.5 inches (29 x 191 x 89 mm) <b>Power Supply:</b> 4.6 x 7.5 x 3.5 inches (106 x 191 x 89 mm) <b>Rack Chassis:</b> 19.0 x 12.0 x 3.5 inches (483 x 305 x 89 mm)
<b>Power</b>	<b>MIPS-12C:</b> 110 VAC/60 Hz
<b>Power Dissipation</b>	<b>Down-converter:</b> 3.2 W <b>Up-converter:</b> 5.30 W
<b>Weight</b>	<b>Each Module:</b> 0.8 lbs (0.36 kg) <b>Fully Loaded Chassis:</b> 20 lbs (9 kg)
<b>Operating Temperature:</b>	32 to 122 °F (0 to 50 °C)
<b>Storage Temperature:</b>	-13 to 158 °F (-25 to 70 °C)
<b>Operating Humidity:</b>	0 to 95% RH @ 35 °C max, non-condensation
<b>Storage Humidity:</b>	0 to 95% RH @ 35 °C max, non-condensation

## MONITORING/INDICATORS

<b>Down-converter</b>	<b>Ch. Number:</b> Front-panel; 2-Digit LED Display <b>Ch. Selection/Activation:</b> Front-panel; Up/Down Push Buttons
<b>Up-converter</b>	<b>Ch. Number &amp; RF Level:</b> Front-panel; 2-Digit LED Display <b>+100 Ch. Indicator:</b> Front-panel; LED, Red <b>Ch. Selection/Activation:</b> Front-panel; Up/Down Push-Buttons <b>RF Level:</b> Front-panel; Up/Down Push-Buttons

## RELATED PRODUCTS

Model	Description
DHDP-50	Digital TV & High-Definition TV Processor; +50 dBmV Output; 1RU
AQT	QPSK/8PSK-to-QAM Transcoder, 8 modules in 3RU