

VCA6800+S/D

1x4 or 1x8, Analog Video, Clamping and Equalizing

The VCA6800+ is an analog video clamping and equalizing distribution amplifier (DA) built for use with the 6800+™ modular processing platform.

This DA provides a jumper-selectable, input-coupling mode (DC or AC coupling) and is capable of hard and soft clamping to the composite NTSC and PAL video signal.

Features

- One differential input
- Eight outputs with double-back module; four outputs with single-back module
- AC and DC input coupling selectable
- Looping and internal terminating selectable with dual-slot back module; internal terminating with single-slot back module
- ±3 dB gain adjustable range
- >50 MHz bandwidth
- Continuous cable equalizing up to 984 ft (300 m) Belden 8281 cable or equivalent
- Back porch clamp with selectable soft, hard and non-clamp modes
- Hot-swappable
- Optional removable gain/EQ control
- Module presence reporting via Imagine® CCS Navigator™ control system

Specifications

Specifications and designs are subject to change without notice

INPUTS	
Input Level	1 V pk-pk nominal
Maximum Input Level	2.5 V pk-pk centered @ 0 V
Input Impedance	75 ohms, looping or internal terminating selectable
Input Coupling	DC-, AC-selectable
Input Return Loss	>45 dB to 5 MHz, >40 dB to 10 MHz
CMRR	>65 @ 10 kHz
CM Input Range	>28 V pk-pk
OUTPUTS	
Number of Outputs	8 (D back module), 4 (S back module)
Output Impedance	75 ohms
Output Return Loss	>45 dB to 5 MHz, >40 dB to 10 MHz
Output Isolation	>40 dB @ 10 MHz

OUTPUTS	
Response Variation	<0.1 dB @ 10 MHz
Phase Match	<±0.2°
PERFORMANCE	
Gain	-3 to 3 dB
Frequency Response	±0.05 dB DC-10 MHz, ±0.2 dB to 20 MHz, -3 dB >50 MHz
Line Tilt	<0.20% DC coupling
Field Tilt	<0.20% DC coupling
Differential Gain	<0.15%
Differential Phase	<0.15°
DC Offset	<25 mV
EQ Response	±0.05 dB to 5 MHz, ±0.15 dB to 10 MHz, 0-300 m Belden 8281
Clamp Level	<±25 mV
Clamp APL Effect	<±5 mV
Clamp Delay	3 lines for hard, 7 lines for soft
S/N	>70 dB by VM 700
Propagation Delay	15 ±1.0 ns
Performance Temperature	41° to 104° F (5° to 40° C)
Operating Temperature	32° to 122° F (0° to 50° C)
Power Dissipation	<2 W

Ordering Information

VCA6800+S	1×4 DA, analog video, clamping and equalizing, 1 slot
VCA6800+D	1×8 DA with looping input, analog video, clamping and equalizing, 2 slots

Images/Diagrams

