PANDORA Wideband Signal Processing Platform

The PANDORA is a high-performance wideband signal processing platform. It provides power supply, reference signals, communication approach and various controls for all modules running on it. Function modules supported include downstream keyers, audio processors, emergency changeovers and logo generators. Available to handle both SD only or SD, HD compatible modules.

Flexible Control Options

Local operations are available via LCD display and buttons on the front panel. The serial port and the Ethernet port are provided for high-performance communication. The platform and modules are allowed to be controlled remotely via Windows-based software PD-MASTER.

High Reliability

Front-pluggable power supply, control module, and rear-pluggable function modules facilitate maintenance and upgrade. Redundant power supplies and sync reference generators are supported for higher operating safety. Internal temperature-controlled cooling assembly ensures a reliable working environment for modules.

KEY FEATURES AND BENEFITS

Frame and signal

— 1RU and 2RU
— Redundant and hot-swappable power supplies
— Front-pluggable control module and power supply
— Rear-pluggable and hot-swappable functional modules
— Internal speed-controlled cooling system

Communication

— Communication with platform and modules via either serial port or Ethernet port
— RS-232 and RS-422 protocols supported
— 10M/100Mbps-based Ethernet

Synchronization

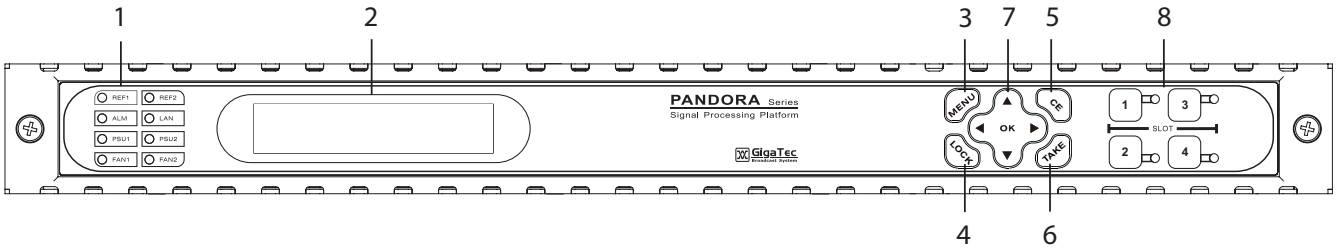
— 2 reference inputs, HD/SD, AES3 and Word Clock supported
— External reference signals can be assigned to any slot
— Sync signal generator can select any reference source
— Internal video sync generators can provide H, V, ODD/EVEN Lock, SD and HD signals
— Internal audio sync generators can provide signals at 3.072 MHz, 12.288 MHz and 48 kHz
— Genlock available for both video and audio sync clock
— Redundant sync generators and genlock units

Miscellaneous

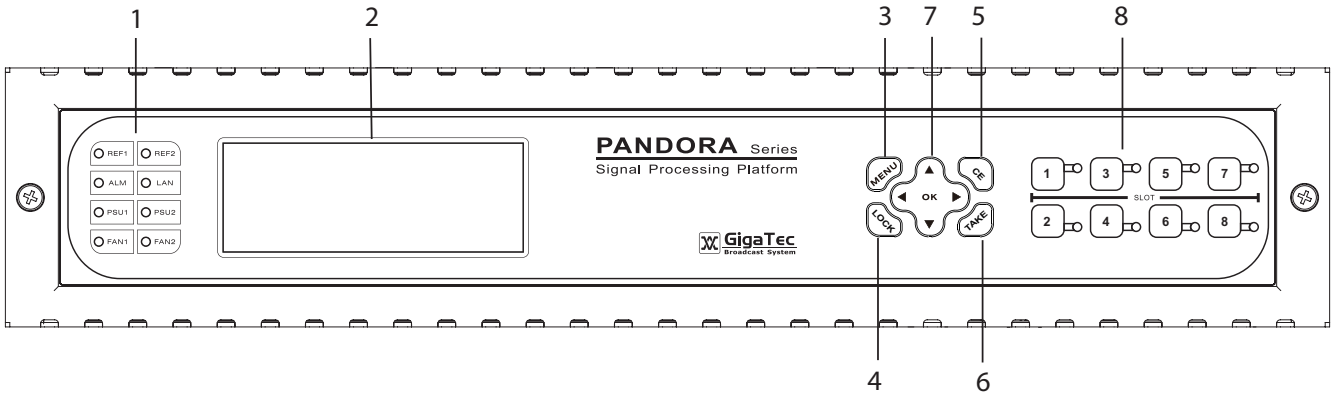
— Both platform and modules can be controlled via front-panel LCD and buttons
— Front-panel LEDs indicating status of slot, module, fan, power supply, reference signals, Ethernet communication and alarm

FRONT PANEL

1RU



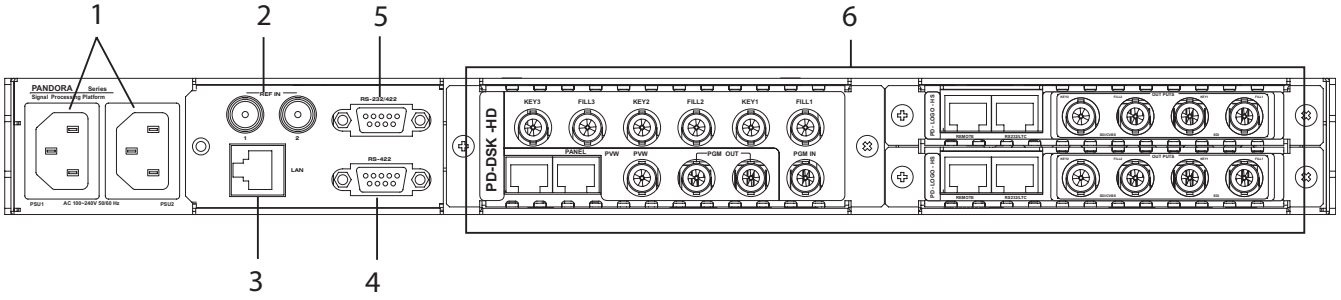
2RU



1. Status indicators
2. LCD display
3. Menu button
4. Clear button
5. Enter button
6. System button
7. Navigation buttons
8. Module select buttons and indicators

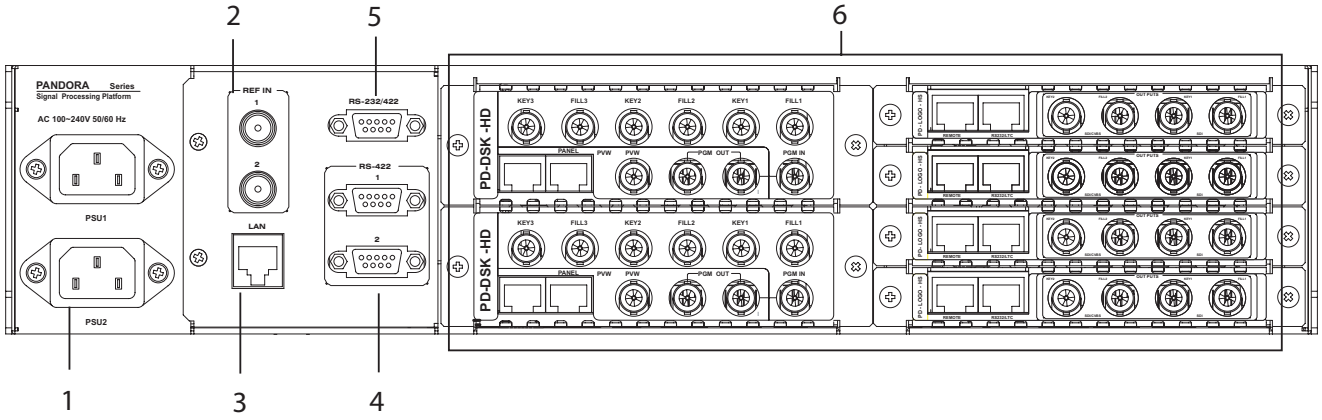
BACK PANEL

1RU



1. Dual power supply inputs
2. Reference inputs
3. Ethernet port
4. RS-422 port
5. RS-232/422 port
6. Functional modules

2RU



1. Dual power supply inputs 2. Reference inputs 3. Ethernet port 4. RS-422 port 5. RS-232/422 ports 6. Functional modules

SPECIFICATIONS

Specifications are subject to change without notice.

CONNECTOR
REF IN.....BNC (×2)
LAN.....RJ-45 (×1)
RS-232.....DB-9F (×1)
RS-422.....DB-9F (×1) for 1RU
DB-9F (×2) for 2RU

SIGNAL STANDARD
Reference Input
SD Video.....NTSC/525I (SMPTE 125M/267M)
PAL/625I (ITU-R BT.601-5)
525P/59.94 (SMPTE 293M)
625P/50 (ITU-R BT.1358)
HD Video.....SMPTE 274M, SMPTE 292M
Audio.....AES3
48 kHz Word-Clock
96 kHz Word-Clock
192 kHz Word-Clock

Ethernet
LAN.....IEEE802.3

MECHANICAL
Width.....19 in. (483 mm)
Height.....1RU (44 mm), 2RU (88 mm)
Depth.....21 in. (531.5 mm)

ELECTRICAL
Power Supply.....100 ~ 240 V AC ±10%, 47 ~ 63 Hz
Power Consumption.....80 W (×2) for 1RU
150 W (×2) for 2RU

ENVIRONMENTAL
Operating Temperature.....32° ~ 104° F (0° ~ 40° C)
Relative Humidity.....10% ~ 90%