



## Powerful Architecture

- + 12 Mic/Line inputs with AEC
- + Built-in VoIP: 2 lines +3 lines (license)
- + Built-in Telco with ClearEffect™ processing
- + Built-in USB for PC-based conferencing
- + Built-in Dante™ for networked audio
- + Reduced footprint and power consumption

## Scalable Connectivity

- + Standalone and daisy-chained system
- + Stack units for up to 144 Mic/Line inputs
- + Expansion bus "C-Link" with 64 channels
- + "P-Link" bus to connect peripheral devices

## Configuration & Management

- + New CONSOLE® software
- + Auto-discovery of devices
- + MatrixView™ for entire system
- + FlowView™ for visualized audio signal paths
- + System monitoring and troubleshooting

## Audio Signal Processing

- + Next-gen Acoustic Echo Cancellation processing
- + Distributed Echo Cancellation® on every mic input
- + Noise Cancellation with Adaptive-Ambience
- + Acoustic Intelligence with faster convergence
- + DARE™ feedback elimination
- + Advanced microphone gating

## Any Application

- + VoIP/POTS conferencing
- + PC-based conferencing & Unified Communications
- + Sound Reinforcement applications
- + Dante™ for audio networking

## Flexible Control Options

- + Dialer app for Windows, Mac, iOS, and Android
- + Touch Panel Controller with tabletop and wall mount options
- + 3<sup>rd</sup>-party control modules



## APPLICATIONS

Boardrooms

Conference Rooms

Huddle Rooms

Training Rooms

Lecture Halls

Courttrooms

Auditoriums

Telemedicine Facilities

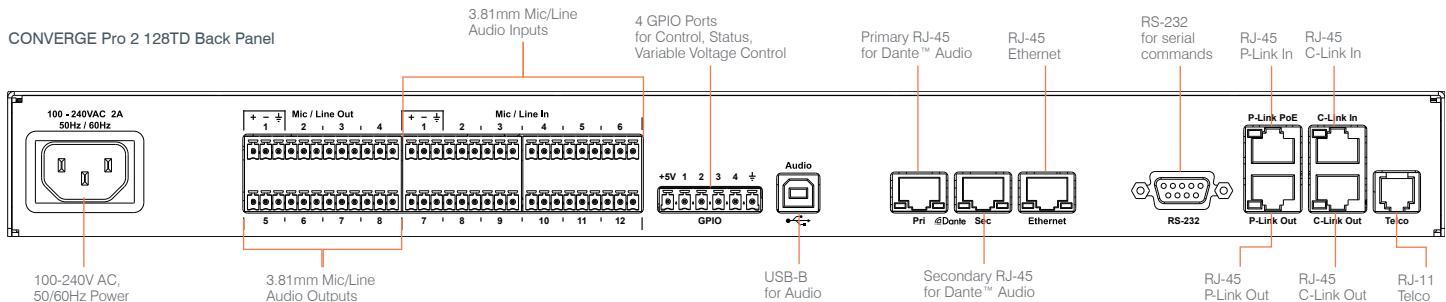
**CONVERGE Pro 2 is the industry's most advanced professional audio DSP platform for conferencing and sound reinforcement applications. It outperforms in any size room, any audio environment, any application.**

**CONVERGE Pro 2 is optimized to work with the new Beamforming Mic Array 2 and DIALOG® 20 2-Channel Wireless Microphone System through its native connection.**

## CONVERGE Pro 2 128TD Front Panel



CONVERGE Pro 2 128TD Back Panel



## PRODUCT SPECIFICATIONS

Unless otherwise specified, all measurements are performed with a 20Hz to 22kHz BW (no-weighting). Specifications are applicable based on the SKU types.

### Mic/Line Inputs & Outputs

**Inputs:** Balanced audio inputs, 3.81mm Orange color Phoenix/Euroblock type male header, Push-on mini-terminal block

**Outputs:** Balanced audio outputs, 3.81mm Black color Phoenix/Euroblock type male header, Push-on mini-terminal block

**Frequency Response:**  
20Hz – 22kHz @ +4dBu, +/- 0.5dBu

**EIN (Equivalent Input Noise):**  
20kHz BW, max gain, Rs = 150Ω, -126dBu

**THD + N (Total Harmonic Distortion + Noise):**  
20Hz – 22kHz @ +4dBu, line level, 0.006%  
20Hz – 22kHz @ -56dBu, mic level, <0.04%

**Dynamic Range:**  
20Hz – 20kHz @ 0dB, >105dB

**Crosstalk (Mic/Line):**  
Channel to Channel, stimulus at 20dBu to receptor at -56dBu, 1kHz, < -98dB

**Input Impedance:**  
Balanced (line to ground), 2.2kΩ, 1%

**Nominal Input Level:**  
Adjustable -56dB to 0dB, 7dB step coarse gain

**Maximum Input Level:** -65dBu to 20dBu

**Phantom Power:** 48V, Impedance 6.81kΩ

**Output Impedance:**  
Balanced (line to ground), 95Ω, 1%

**Output Level:**  
0dBu (Nominal), 20dBu (Max), -40dBu (Selectable)

### USB Audio

**Port Type:** USB-B connector

**Audio:** Digital Audio, 2 x 2 bidirectional channels

**Sample Rate:** 48kHz

**Sample Bit Depth:** 24-Bit

**Compatible:**  
USB 2.0  
USB 3.0

### Telephone

**Port Type:** RJ11

**Frequency Response:**

Mic/Line Input to Telephone Out:  
250Hz – 3.4kHz, +/- 2dB, 4dBu  
Telephone In to Mic/Line Out:  
250Hz – 3.4kHz, +/- 2dB, -15dBu

**THD + N:**

Mic/Line Input to Telephone Out: <0.1% @ 4dBu  
Telephone In to Mic/Line Out: <0.3% @ -15dBu

### Dynamic Range:

Mic/Line Input to Telephone Out: >67dBu  
Telephone In to Mic/Line Out: >87dBu

### REN: Ringer Equivalent Number 0.2

### Transhybrid Balance:

30dB (1kHz, all AC terminations)

### VoIP

#### Port Type:

RJ-45, 10/100Mbps Ethernet Network, Auto Negotiation

#### Audio:

5 Lines (2 default + 3 lines through License),  
each line supporting 1+5 calls

#### Codec:

G.711 uLaw  
G.711 ALaw  
G.722

### Ethernet

#### Port Type:

RJ-45, 10/100Mbps Ethernet Network, Auto Negotiation

#### IP address:

IPv4 (IPv6 upgradeable through future s/w, f/w upgrade)

### Dante™ Audio

**Port Type:** RJ-45 Gigabit Ethernet connectors for Primary and Secondary Ports

**Audio:** Digital Audio, 16 x 16 bidirectional channels

**Sample Rate:** 48kHz / 96kHz

**Sample Bit Depth:** 24-Bit

### Amplifier Output (Applicable to 48T SKU)

**Speaker Output Port:** Dual binding posts

**Audio:** 2 Channels

**Output Power:** 10W Max, 8Ω load

#### Frequency Response:

20Hz – 22kHz @ +10dBu, +/- 0.5dBu

**THD + N:** 20Hz – 22kHz @ +10dBu, 1W, <0.3%

### Dynamic Range:

20Hz – 22kHz @ 20dB, >102dB,  
with 20kHz digital low pass filter

### Crosstalk:

Channel to Channel, stimulus at 20dBu,  
10W output to receptor 8Ω load, 20Hz – 22kHz, < -70dB

### C-Link Expansion Bus

**Ports Type:** RJ-45 (Cat5e or Cat6)

**C-Link In & Out:** Proprietary Expansion Bus

**Audio:** 64 Expansion channels

**Cable:** Solid core, factory terminated Cat 5e or 6 cable

**Distance:** Up to 150 Ft (45M)

### P-Link Peripheral Bus

**Ports Type:** RJ-45 (Cat5e or Cat6)

**P-Link In & Out:** Proprietary Peripheral Bus

#### PoE In:

P-Link In Port  
PoE IEEE802.3AF

#### Audio:

Up to 3 Beamforming Microphone Array 2 units + up to 3 DIALOG 20 Wireless Receiver units

**Cable:** Solid core, factory terminated Cat 5e or 6 cable

**Distance:** Up to 200 Ft (60M)

### RS232

**Port Type:** DB9 Female

#### Settings:

9600/19200/38400/57600/115200 Baud; Serial Echo; Flow Control

**Support:** Serial commands

### GPIO

#### Port Type:

5.08mm Green color Phoenix/Euroblock type male header

**Support:** Control, Status, Variable Voltage Control

**Power Pin:** 5V DC @ 350mA Power Source

#### Pin 1 to 4:

Open Collector Outputs: 40VDC @ 250mA  
Active Outputs (Source/Sink): 5VDC @25mA  
Logic Inputs: 40.2kΩ pull up  
Variable Voltage Control Inputs: 5VDC max

**Ground Pin:** GND

### USB Control

**Port Type:** USB-B connector

**Location:** Front Panel

#### Compatible:

USB 2.0  
USB 3.0

**PRODUCT SPECIFICATIONS**

Unless otherwise specified, all measurements are performed with a 20Hz to 22kHz BW (no-weighting). Specifications are applicable based on the SKU types.

**LEDs**

**Location:** Front Panel

**Status LED:**

Off: Unit still initializing  
Blue - Fast Blinking: Stack Syncing in progress  
Blue - Slow Blinking: Unit not configured  
Blue - Solid: Configured unit  
Red - Fast Blinking: Stack Sync error

**Locate LED:**

Blue - Blinking: Unit "Locate" command received

**Power LED:**

Blue - Solid: Unit is powered on

**Touch Sensor**

**Sensor Type:** Capacitive Touch Button

**Location:** Front Panel

**Power & Thermal**

**Port Type:** AC Inlet

**Mains Voltage:** 100-240V AC, 50/60Hz

**Power Consumption:** 50 Watts Typical

**Thermal:** 170 BTU/Hr Typical

**Operating Temperature:**

14°F/-10°C to 104°F/40°C Ambient Temperature

**Dimension & Weight**

**RU size:** 1 RU

**Width x Depth x Height:**

- Without rack-ears:  
17 x 10.73 x 1.72in or 43.2 x 27.3 x 4.4cm
- With rack-ears:  
19 x 10.73 x 1.72" or 48.3 x 27.3 x 4.4cm

**Unit Weight:** 9.3 lbs (Approximately)

**Shipping Weight:** 13.8 lbs (Approximately)

**Package (as applicable based on SKUs)**

**Power Cord:** 6 Ft (1.8M), Grounded, Qty 1

**Input Connectors:**

Terminal Block Connector, 3 Position (Orange), Qty 12

**Output Connectors:**

Terminal Block Connector, 3 Position (Black), Qty 8

**GPIO Connector:**

Terminal Block Connector, 6 Position (Green), Qty 1

**C-Link Cable:**

RJ-45 To RJ-45 Cable, 18 Inches (0.45M), Qty 1

**Telephone cable:** 12 Ft (3.6M), Qty 1**VoIP Cable:** RJ-45 To RJ-45, 7 Ft (2M), Qty 1**USB Cable:** USB Type A to Type B, 6 Ft (1.8M), Qty 1

**Rack Ears:** Pre-installed, Qty 2

**Screw/Washer Kit:** Rack Decor, Qty 4

**Part Numbers**

Part Number	Product
910-3200-001	CONVERGE Pro 2 128
910-3200-001-D	CONVERGE Pro 2 128D
910-3200-002	CONVERGE Pro 2 128T
910-3200-002-D	CONVERGE Pro 2 128TD
910-3200-003	CONVERGE Pro 2 128V
910-3200-003-D	CONVERGE Pro 2 128VD
910-3200-005	CONVERGE Pro 2 48T
910-3200-006	CONVERGE Pro 2 48V
910-3200-004	CONVERGE Pro 2 120
910-3200-007	CONVERGE Pro 2 012
910-3200-101	CONVERGE Pro 2 128SR
910-3200-101-D	CONVERGE Pro 2 128SRD

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