The new LD1.0, LD 2.0 and LD 3.0 in the Opus Technologies family are a nextgeneration perimeter magnetic loop amplifiers. The amplifiers offer the necessary functionalities (AGC, MLC, compressor, etc) to ensure rooms installation up to $250 \mathrm{~m}^{2}$ (LD1.0), $450 \mathrm{~m}^{2}$ (LD2.0) or $1000 \mathrm{~m}^{2}$ (LD3.0).

The amplifiers incorporate a fault synthesis that controls continuously the loop and the amplifier. The information is displayed on the front panel and can be deported thanks to a dry contact. Due to the high-efficiency Class D technology, amplifiers consume less and have natural cooling.

The amplifiers output voltage, the largest available on the market for this type of amplifier, ensures outstanding sound quality without clipping or distortion. The variable frequency of switching class $D$ amplifiers developed by Opus Technologies allows unparalleled performance in the smallest case size on the market and an exceptional sound signal.

The LD. 0 can also be used in a low diaphonic phased loop system or an ultra high coverage system with a built-in $90^{\circ}$ or $0^{\circ}$ phase shift module ( 2 amplifiers). Solution used for the equipment of large rooms or adjoining rooms (hairpin systems).

Amplifiers have been developed with strict and rigorous specifications that allow us to offer a 5 year warranty and meet the IEC 60118-4 norm.

- Class D amplifier
- The most compact on the market
- Efficiency up to 92\%
- Fanless convection
- High output voltage up to 48Vpk
- Voice alarm (100V) Input prioritary
- Automatic gain control
- Wall mounting available
- Warranty 5 years
- Correction settings due to metal losses
- Monitoring and detection of clipping, loop and temperature



## Coverage

Cover meets the IEC 60118-4 standard

|  |  | o metal loss |  |  | derate meta | loss |  | metal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loop | Perimeter loop | Single array in 8 | Low overspill* | Perimeter loop | Single array in 8 | Low overspill* | Perimeter loop | Single array | Low overspill* |
| LD1.0 | $\underset{(10 \times 25 \mathrm{~m})}{250 \mathrm{~m}^{2}}$ | $\begin{aligned} & 450 \mathrm{~m}^{2} \\ & (15 \times 30 \mathrm{~m}) \end{aligned}$ | $\begin{aligned} & 450 \mathrm{~m}^{2} \\ & (15 \times 30 \mathrm{~m}) \end{aligned}$ | $\begin{aligned} & 130 \times 13 \mathrm{~m}^{2} \\ & (10 \times 13 \mathrm{~m} \end{aligned}$ | $\begin{aligned} & 180 \mathrm{~m}^{2} \\ & (10 \times 18 \mathrm{~m}) \end{aligned}$ | $\begin{aligned} & 450 \mathrm{~m}^{2} \\ & (15 \times 30 \mathrm{~m}) \end{aligned}$ | Use Multi Loop Systems LDx. 2 and/or Contact us |  |  |
| LD2.0 | $\begin{aligned} & 450 \mathrm{~m}^{2} \\ & (15 \times 30 \mathrm{~m}) \end{aligned}$ | $\begin{gathered} 650 \mathrm{~m}^{2} \\ (20 \times 32,5 \mathrm{~m}) \end{gathered}$ | $\begin{gathered} 650 \mathrm{~m}^{2} \\ (20 \times 32,5 \mathrm{~m}) \end{gathered}$ | $\begin{aligned} & 160 \mathrm{~m}^{2} \\ & (10 \times 16 \mathrm{~m}) \end{aligned}$ | $\underset{(8 \times 35 \mathrm{~m})}{280 \mathrm{~m}^{2}}$ | $\underset{(20 \times 32,5 \mathrm{~m})}{650 \mathrm{~m}^{2}}$ |  |  |  |
| LD3.0 | $\underset{(16 \times 62 \mathrm{~m})}{1000 \mathrm{~m}^{2}}$ | $\underset{(35 \times 40 \mathrm{~m})}{1400 \mathrm{~m}^{2}}$ | $\begin{gathered} 1400 \mathrm{~m}^{2} \\ (35 \times 40 \mathrm{~m}) \end{gathered}$ | $\underset{(10 \times 25 \mathrm{~m})}{250 \mathrm{~m}^{2}}$ | $\begin{aligned} & 360 \mathrm{~m}^{2} \\ & (10 \times 36 \mathrm{~m}) \end{aligned}$ | $\begin{gathered} 1400 \mathrm{~m}^{2} \\ (35 \times 40 \mathrm{~m}) \end{gathered}$ |  |  |  |

*with 2 amplifiers

## Accessories

|  | LD1.0 | LD2.0 | LD3.0 |
| :---: | :---: | :---: | :---: |
| INPUTS |  |  |  |
| Audio inputs | 3 inputs: x2 Ligne/microphone- x1 100V |  |  |
| Type | Phoenix and/or Combo Neutrik |  |  |
| Power suppky | 12 V 2 mA |  |  |
| Sensitivity | -50 dB micro, $+40 \mathrm{~dB} 100 \mathrm{~V},-10 \mathrm{~dB}$ ligne |  |  |
| Slave input | 6.35 mm Jack plug. |  |  |
| Priority | 100 V input |  |  |
| POWER SUPPLY |  |  |  |
| Type | Integrated |  |  |
| Voltage | $\begin{aligned} & 115 / 230 \mathrm{~V} \\ & \text { (automatic } \\ & \text { ) } 50 / 60 \mathrm{~Hz} \end{aligned}$ | $\begin{aligned} & \text { 230V (optionnal 120V) } \\ & 50 / 60 \mathrm{~Hz} \end{aligned}$ |  |
| Power | 200VA | 300VA |  |
| Consumption | 6W |  |  |
| AUDIO CHARACTERISTICS |  |  |  |
| Metal loss | 0 to 3 dB by octave |  |  |
| Automatic Gain Control | AGC optimized for speech Dynamic > 36 dB |  |  |
| Bandwidth | 80 Hz to 9.5 kHz |  |  |
| Phase change | Phase module ( $90^{\circ}$ or $0^{\circ}$ ) |  |  |
| OUTPUT |  |  |  |
| Loop impedance | $0.5 \Omega$ to $3 \Omega$ |  |  |
| Output voltage | 34 Vrms (48Vpk) | 35 V rms ( 50 V pK ) |  |
| Peak current | 8A | 11A pK | 15A pk |
| RMS current | 5Arms | 7A rms | 10A rms |
| ADDITIONAL FUNCTIONS |  |  |  |
| Defaults | LED display "protect" |  |  |
| Verification (lack of synthesis) | DC current too high - open loop thermal protection |  |  |
| Relay | NO / NC fault relay |  |  |
| Cooling | Natural cooling |  |  |
| IP class | IP 20 |  |  |
| Frequency response | $40-9000 \mathrm{~Hz}$ |  |  |
| DIMENSIONS (MM) |  |  |  |
| HxLxD | $42 \times 200 \times 215 \mathrm{~mm}$ |  |  |
| Weight (with the box) | $1.5 \mathrm{~kg}(1.9 \mathrm{~kg})$ |  |  |

## RC

Copper tape with 1 conductor designed for induction loops. $1 \times 1,8 \mathrm{~mm}^{2}$


## OP-R

Complete kit for wall mounting or 1 or 2 units of the LD series in a 19 " rack


## C10-RC

Terminal block for RC copper foil


OP-FSM-02

Tester and magnetic field meter in accordance with the IEC 60118-4 specification. Supplied with an OP-778 headset


## Opus Smartloop



The loop simulation software developed by Opus guarantees technical studies that comply with the EN60118-4 standard
contact@opus-technologies.fr www.opus-technologies.fr

