### **PRODUCTIONSSYSTEM**

# **ANDONNODE LP330**

- ② Multi-function Andon node with digital IO and audio output.
- ② M12 connectors for quick and easy installation.
- Built-in mp3 player to store audio files.
- Serial channel to connect ID readers.





## **ANDONNODE LP330**

Andon is a key principle in Lean Manufacturing, which involves monitoring and addressing disruptions in the production process. The Andon team leader or coach is in charge of resolving issues promptly so that operators can maintain their productivity. An organization that actively implements Andon is more dedicated to improving their operations, leading to increased profitability and productivity.

The LP330 is a versatile node featuring 2 digital inputs, 2 digital outputs, an RS232 serial channel with two digital I/Os, and an audio output. It connects to the parent gateway via CAN bus for efficient data exchange.

Examples of connectable components include the Andon switch, Andon light, Andon button, Andon speaker, and ID reader for operator login.

The audio output is a low-level signal that requires amplification before connecting to a speaker. The Andon 51380 speaker contains a 15W built-in amplifier and is connected using a shielded cable.



#### MP3-player

Valid MP3 format (MPEG Layer III). Our format is compatible with VBR, allowing for variable bitrates.

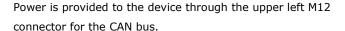
MPEG 1.0	Bitrate / kbit/s													
Sample rate / Hz	32	40	48	56	64	80	96	112	128	160	192	224	256	320
48000	+	+	+	+	+	+	+	+	+	+	+	+	+	+
44100	+	+	+	+	+	+	+	+	+	+	+	+	+	+
32000	+	+	+	+	+	+	+	+	+	+	+	+	+	+

MPEG 2.0	Bitrate / kbit/s													
Sample rate / Hz	8	16	24	32	40	48	56	64	80	96	112	128	144	160
24000	+	+	+	+	+	+	+	+	+	+	+	+	+	+
22050	+	+	+	+	+	+	+	+	+	+	+	+	+	+
16000	+	+	+	+	+	+	+	+	+	+	+	+	+	+

MPEG 3.0	Bitrate / kbit/s													
Sample rate / Hz	8	16	24	32	40	48	56	64	80	96	112	128	144	160
12000	+	+	+	+	+	+	+	+	+	+	+	+	+	+
11025	+	+	+	+	+	+	+	+	+	+	+	+	+	+
8000	+	+	+	+	+	+	+	+	+	+	+	+	+	+

#### **Status indications**

Green power along the top right of the device and green power just above the CAN contacts indicate that the device has a 24VDC voltage.





The Yellow BUS illuminates when the Gateway establishes communication with the device, which typically occurs immediately following power-on and remains continuous thereafter. The red ERR signals an error on the device.

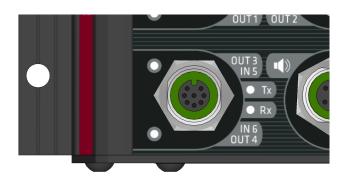
There are two M12 connectors with A-coding on the LP330. The first connector features IN1 and OUT1, while the second connector features IN2 and OUT2. The status of the signal, whether on or off, is indicated by yellow indicators on the exterior of the connectors. IN3 and IN4 are not utilized.





The audio output status indicator next to the M12 connector illuminates when the device is producing sound.

The RS232 serial port includes two I/Os that can function as either IN5 or IN6 inputs, or as OUT3 or OUT4 outputs. The I/O indicators are located on the left side of the M12 connector, while the right side indicates the transmission and reception with Tx and Rx.



TECHNICAL DATA	
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Article number	51330
Supply voltage	20 - 32 VDC
Power consumption	40 mA
Connector	M12
Data transfer	CAN, 125 kbit/s
SD-memory	4 Gb
CE	EN 61000-6-4 and EN 61000-6-2
Temperature area	0 – 50 °C
Protection	IP51
Wight	430 g
Mounting	Screw mounting
Dimensions	w124 x h129 x d52
DIGITAL INPUTS	
Quantity	2
Туре	PNP
Impedance	4.5 kOhm
Hardware filter	1 ms
Software filter	5 ms
Indications	2 LED yellow
DIGITAL OUTPUTS	
Quantity	2
Туре	PNP
Max current	Per channel – 1.9 A. Total per units – 3.7 A
Protection	Short circuit protection, thermal shutdown
Indications	2 LED yellow
SERIE CHANNEL RS232	
Quantity	1
Indications	2 LED yellow (Tx och Rx)
Transmission speed	Software controlled
Data bits	Software controlled
Parity	Software controlled
Stop bits	Software controlled
Flow control	Software controlled



#### **Binar Solutions AB**





