

EVAMATRIX System

DPN SERIES

Digital Network Amplifiers

DPN-240S · DPN-240D · DPN-240Q · DPN-480S · DPN-480D



EN 54 16

FEATURES

- The DPN series offers a wide choice of single or multi-channel power ratings, in line 70V/100V with galvanic isolation.
- The amplifiers are EN54-16 certified and designed to work with the EVAMATRIX security PA system.
- All system components are fully IP networked (audio & control) using Dante® technology.
- Dual primary and secondary network connection for total redundancy.
- Low power consumption, low heat dissipation for energy savings and gains in battery capacity and backup power.
- Complete supervision of the operation of the amplifiers and all connections. Faults are reported locally on the EVAMATRIX and archived.
- Control and supervision of the loudspeaker lines WITHOUT audio interruption with the EOL-20 end of line element
- Control and supervision of the network link with audible and visual indication on the amplifier unit and EVAMATRIX.
- Integrated backup amplifier channel dynamically assignable from the EVAMATRIX web interface with automatic switchover
- 2 A/B outputs on each amp channel. The 2 outputs are supervised and individually disabled in case of failure.
- Audio over IP, Dante® and AES67 compatible; audio sample rate is of 48 kHz with a sample size of 24 bits.
- High signal to noise ratio, wide audio bandwidth, very low distortion and crosstalk.
- DSP, digital signal processing on all amp channels from the EVAMATRIX control unit web server, including equalization, levels to optimize and customize the sound in each speaker zone.



DPN-240S / 480S



DPN-240D / 480D



DPN-240Q

SEVERAL POWERS FROM SINGLE TO QUADRUPLE CHANNEL

1 x 240W : DPN-240S 2 x 240W : DPN-240D 4 x 240W : DPN-240Q
1 x 480W : DPN-480S 2 x 480W : DPN-480D

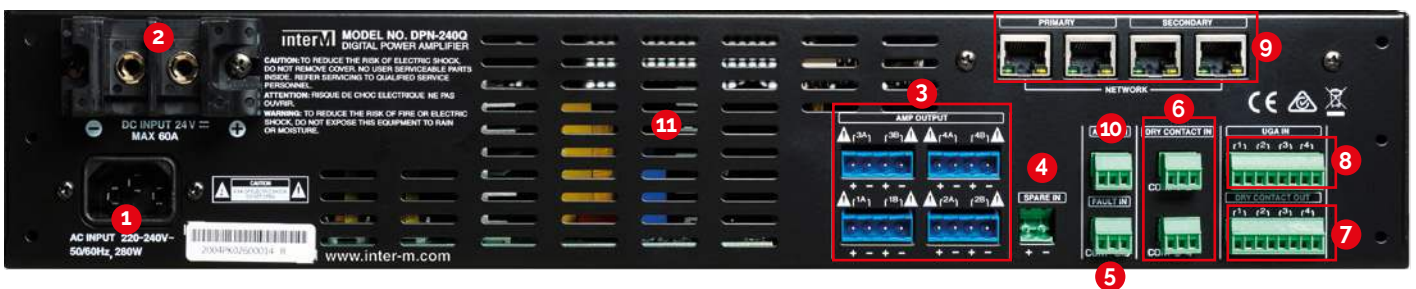
- Local UGA and dry contact inputs monitored for triggering of alarm conditions, alarms... Ideal for decentralized systems.
- Dry contact inputs for local feedback of third party faults (CMSI, EAE, GTC...) in case of decentralized use.
- Local fault outputs customizable as desired and by alarm zone.
- An additional local analog audio input on each DPN amplifier that will be converted and made available to the entire EVAMATRIX system.
- The system integrates the SNMP V2c protocol (Simple Network Management Protocol) which allows a management and monitoring software to report any type of fault and status of the sound equipment.
- The system incorporates seamless security (HTTPS, TLS1.2, SHA256, SSL, AES256 encryption and elliptic curve cryptography).

FRONT FACE



- 1 Status LEDs: system, power, network LEDs
- 2 Audio signal level and protection
- 3 Status LEDs: amplifier fault, speaker line fault, zone out of order
- 4 OLED information display and control wheel

REAR FACE



- 1 220 V AC power outlet
- 2 24 V DC power supply input (EAE backup)
- 3 AMP OUTPUT: A&B speaker line output terminal
- 4 100V input emergency amplifier
- 5 Fault IN : monitored and programmable drycontact inputs (e.g. EAE fault)
- 6 DRY CONTACT IN: monitored dry contact inputs and Programmable (e.g.: Alarm/Alerts...)
- 7 DRY CONTACT OUT: programmable dry contact outputs (e.g.: defect carry-over...)
- 8 UGA IN: monitored UGA input for alarm/alert triggering
- 9 Dante® Primary & Secondary Ethernet Ports
- 10 AUDIO IN: line level audio input
- 11 Air exhaust vent

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Dante™

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TECHNICAL CHARACTERISTICS

MODEL	DPN-240S	DPN-240D	DPN-240Q	DPN-480S	DPN-480D	
Power supply	220 - 240VAC, 50/60Hz, 24VDC					
Power	1 x 240W RMS @ 70V/100V Class D Load Min 41.6Ω, Capacity Min 0.01uF	2 x 240W RMS @ 70V/100V Class D Load Min 41.6Ω, Capacity Min 0.01uF	4 x 240W RMS @ 70V/100V Class D Load Min 41.6Ω, Capacity Min 0.01uF	1 x 480W RMS @ 70V/100V Class D Load Min 41.6Ω, Capacity Min 0.01uF	2 x 480W RMS @ 70V/100V Class D Load Min 41.6Ω, Capacity Min 0.01uF	
Consumption	Max	313W	595W	1 254W	583W	1 191W
	1/8 power	135W	140W	280W	135W	240W
	Standby	58W	75W	89W	59W	82W
Frequency response	20Hz - 20kHz à (±3dB @ 1W)					
Signal / Noise	> 91dB (20kHz LPF, A-WTD)					
T.H.D	< 0.45% at 1kHz Power rating					
Audio input	Type: Balanced Euro terminal / Input sensitivity: 5 dBV (1.78 Vrms)					
Ethernet (LAN)	RJ45, TCP/IP protocol 100/1000 Base-T					
Extension	Output to EVAMATRIX on RJ45 (Dante®) - Input from EVAMATRIX on RJ45 (Dante®) CAT5 cable Maximum distance: 100m					
UGA inputs	UGA inputs 1 ~ 4 : triggerable on a voltage (22V ~ 60V)					
Dry contact inputs	Dry contact inputs from (1 ~ 4) : triggerable on dry contact NO/NF					
Dry contact outputs	Dry contact outputs from (1 ~ 4) : Relay output					
Speaker line outputs	4-pin connector, (1ch) for channels A+B					
Backup amplifier input	1 input per channel, for amplifier with equal power					
Protection	Current protection, temperature protection, DC voltage output protection, overload					
AES/EAE emergency power input	24VDC					
FAULT-IN input	Supervised fault input for remote fault reporting (e.g. AES/EAE)					
Screen	1.3" OLED screen					
Operating temperature	-10°C ~ +40°C / Humidity: 5 ~ 95%					
Weight	8,59kg	9,1kg	10,1kg	8,56kg	9,7kg	
Dimensions (WxHxD)	482 x 88 x 450mm					
Accessories	AC power cord, Euroblock connectors, Rack mount screws, User manual					
Protocol and encryption	TCP/IP, Http, Https, SNMP V2c, IPv4, TLS1.2, SHA256, SSL, AES-256, Elliptic curve cryptography					