Module FT-3DOP-3AO

The module for the management of adjustable lighting or peripheral control devices that require analog signals, compatible with all major power regulators.



DESCRIPTION

The LonWorks ® module provides 3 analog outputs 0-10V and 3 digital power outputs.

To each digital exit corresponds a manual switch with 3 positions (0 - A - 1) that allows to force the state of the module independently from the application. The state of the digital and analog outputs is visualized using LEDs.

With its very flexible application developed according to the LonMark standards, this module is suitable for the management of lamps and other illumination.

Using the 0..10V signals provided by the analog outputs, it is possible to adjust the intensity of the lighting (Dimmer function).

The LNS-configuration plug-In allows to define the functionality associated with each digital and analog output in a very simple and intuitive way.





MAIN FEATURES

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- 3 digital power outputs
- 3 analog outputs 0..10 VDC
- Manual commands
- Protection against short circuits
- LNS programming plug-in
- LonWorks FTT-10



Technical
specifications

Power supply	20 30 VDC Maximum consumption < 3 W	
BUS	LonWorks FTT-10 78Kbps 2-wire without polarity	
CPU	Neuron chip FT3150 @ 10MHz 48K Flash 8K RAM	
Controlli	Service button (Service Pin) 6 Switches with 3 positions each (0-Auto-1) for the manual control of the digital and analog outputs (for the digital outputs operation is independent from the sw)	
LED Indicators	Power LED (green) Presence of power Service LED (red) Service indicator Run LED (yellow) Application Status Leds Out 1Out 3 (green) State of digital outputs Leds AO 1AO 3 (green) State of analog outputs	
Connectors	Power and LonWorks bus removable connector 5-Pin 5.08 mm pitch Digital output removable connector 6-Pin 7.62 mm pitch (max. power 15 A) Digital output removable connector 6-Pin 5.08 mm pitch	
Digital power outputs	3 bistable relays with potential-free contact N.A for capacitive loads up to 140 μF and lamps up to 2500 W. Maximum switching voltage 440 VAC Maximum switching current 20 A Maximum switching power 5000 VA Max. number of mechanical commutations 106	
Analog outputs	3 analog outputs 010 VDC (resolution 10 bits) with protection against short-circuits. Galvanic insolation 500 V. Each output is able to manage a minimum load of 500 Ohm equivalent to a maximum current of 20 mA.	
Conditions for use	Temperature -545 °C Relative humidity 10 90 %	
Container	Polycarbonate container (UL 94 V-0) white (top) and black (bottom) to be mounted on a DIN rail.	
Dimensioni	105 x 115 x 59 mm (length x width x height)	
Normative	EN 50130-4 EN 61000- 6-2 EN 61000- 6-3 EN 61000-4-2/3/4/5/6	



Dimensions and Layout

MODULE FT-3DOP-3AO

Power supply and LonWorks bus





Analog outputs



The ground signal (GND) is shared by all 3 analog outputs.

Digital outputs



Type of load	Number of commutations 100'000 30'000	
Incandescence lamps	1250 W	2500 W
Fluorescence lamps, not compensated	1200 W	2500 W
Fluorescence lamps, compensated in parallel	650 W / 70 µF	1300 W / 140 µF
Fluorescence lamps, duo-circuit	2 x 1200 W	2 X 2500 W
Halogen lamps (230 VAC)	1200 W	2500 W
Low voltage halogen lamps with transformer	500 VA	500 VA
Gas-discharge lamps mercury/sodium,		
not compensated	1000 W	2000 W
Gas-discharge lamps mercury/sodium,		
compensated in parallel	1000 W / 70 µF	2000 W / 140 µF
Dulux lamps, not compensated	800 W	1600 W
Dulux lamps, compensated in parallel	560 W / 70 µF	1100 W / 140 µF

Specifications of the loads that can be managed via the digital outputs.