

Datasheet

High Voltage Alternating Current (HVAC) Dimmer + controller

Part No: UMD



Bisly UMD is an RS485 field network I/O controller with two channel 220VAC dimmer for luminaires. UMD is designed for operation in Bisly secure smart building infrastructure.

Electrical Data

Supply voltage	16 - 30 VDC, reverse polarity protected
Power consumption	max. 1W @24V, internal overcurrent protection at ca 0.7A
Power sourcing	5V OUT, max 50mA, short protected
Digital / analog inputs	<p>Inputs 1 - 2: software configurable as DIN or AIN Input 3: software configurable as DIN / AIN / TTL UART / I2C</p> <p>Inputs 1-2 in DIN mode:</p> <ul style="list-style-type: none"> • internal 1kOhm pullup to +5V • active low level $\leq 2V$ • input low pass filter $\tau=100\mu s$ • 5V max operation • temporary reverse voltage protected • 8kV ESD (EN 61000-4-2) protected <p>Input 3 in DIN mode:</p> <ul style="list-style-type: none"> • internal pulldown 30kOhm • active low level $\leq 1V$ • input low pass filter $\tau=100\mu s$ • 5V max operation • temporary reverse voltage protected • 8kV ESD (EN 61000-4-2) protected <p>Inputs 1-3 in analog input mode:</p> <ul style="list-style-type: none"> • 12-bit resolution • VIN full scale 3.3V • internal 1kOhm pullup to +5V (AIN 1 - 2) • input low pass filter $\tau=100\mu s$ • 5V max operation • temporary reverse voltage protected • 8kV ESD (EN 61000-4-2) protected <p>220VAC current meter:</p> <ul style="list-style-type: none"> • 2 channels • 5% full scale measurement accuracy

Internal temperature sensor	-10 to 120°C ±3°C, for safety purposes
Outputs	4x Digital output, open collector, max 24VDC 300mA continuous, 2kV ESD (EN 61000-4-2) protected
Interfaces	RS485 for Bisly secure home bus, XXXkbps, ±50V overvoltage and 4kV ESD (EN 61000-4-2) protected, without internal bus termination 1-Wire master, 20kbps, 5V bus, phantom power capable, 4kV ESD (EN 61000-4-2) protected TTL UART, software configurable, 4kV ESD (EN 61000-4-2) protected
220VAC dimmer	Properties: <ul style="list-style-type: none"> • 2 channels • max 220W a channel • short protected • overtemperature protected • software selectable PWM operation: trailing or leading edge control
Ambient operating conditions	-10 to 30°C (closed montage), -10 to 40°C (open air montage); max. 80% RH (non condensing)

Product Characteristics

Mounting type	Electrical installation box, min 68mm diameter
Colours	Black
Finish	Matte
Flammability of casing	Fire retardant according to UL94 v0

Weight & Dimensions

Total weight	31g
Product dimensions	49x49x18mm

Certifications & Standards

Environmental protection class	IP40
Standards compliance	EN 63044-1, EN 63044-3, EN 63044-5

Installation must be carried out by a qualified electrician in accordance with the relevant regulations.

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