

PROJECT:	_____
CATALOG #:	_____
FIXTURE TYPE:	_____
NOTES:	_____



XPP External Power Pack



Images are shown for illustration purposes only.

Easy fixture integrated controls by Avi-on

Avi-on's Internal Fixture Adapters provide single or dual 0-10V circuit level controls for dimming, zero-cross switched AC power, energy monitoring, and sensor input. Non-volatile memory preserves device settings, including groups and schedules. It includes a 16A full circuit high voltage relay and is designed for junction box mounting installation.

Benefits

- Single integrated unit for all fixture control components
- Push connector terminals for easy installation
- Energy monitoring to qualify for the highest utility rebate levels and lifetime visibility to fixture health
- Connector for Avi-on motion/ALS sensor (coming soon)

Supply Voltage	Channels	Configuration	Relay	Part Number
100-277VAC	Single	Class 1	16 Amp	AVI-XFAC-16A-1CH-CL1
100-277VAC	Single	Class 2	16 Amp	AVI-XFAC-16A-1CH-CL2
100-277VAC	Dual	Class 2	16 Amp	AVI-XFAC-16A-2CH-CL2
XPP without Control Capability - Energy Monitoring of Circuit only				AVI-XFAC-16A-ENERGY

0-10V Dimming

High capacity current sinking 0-10V output fixture controls with dim to off capability

Switched AC Power Output

16A Switched AC output for non dim to off LED drivers. Lighting rated high cycle relay with zero cross triggering.

Tunable White

The XPP includes two 0-10V outputs that support tunable white applications allowing for adjustment of LED color temperature (CCT) along with dimming.

Energy Monitoring

The XPP is equipped with a built-in energy monitoring circuitry providing real-time fixture energy consumption and health monitoring information. Qualifies for top tier rebates in all jurisdictions and meets the DLC 4.0 requirements for measured energy data capability. (Requires Avi-on cloud data collection service).

UL 924 Emergency Lighting

Innovative UL924 listing allows software only support for life safety, eliminating expensive transfer switches and special power wiring for emergency lights.

Persistent Memory

XPPs have internal non-volatile memory that preserves device settings, including groups and schedules through power cycles

In-fixture or J-box mounting

At 91 x 65 x 40mm, External Power Pack adapters are designed for easy integration into fixtures or J-box mounting installation.

Sensor Input

Non-network 24V sensors are compatible and powered through the sensor input. Compatible with up to three Avi-on Dual-tech sensor (AVI-SEN-DUCM-24) per XPP.

Sensor Ready

Includes connector for Avi-on Direct Connect motion with ALS and Microwave with ALS sensors for low cost sensor per fixture applications, while still allowing flexible network configuration of sensors

DETAILED SPECIFICATIONS

Electrical

Specifications	Min	Max	Unit
Supply Voltage	100	277	VAC
Operating Current Consumption (100VAC/277VAC)	20/14	81/46	mA
Output Voltage 0-10V_OUT	0.02	10.35	V
Storage Temperature	-40	+85	°C
Ambient Operating Temperature	-20	+45	°C
Relay Current (Electronic Ballast/LED Driver)	-	16	A
Amperage for 0-10V lines	-	325	mA/CH

High Voltage Terminal Connections (Isolated)

Signal Name	Wire Color	Description
AC VOLTAGE (LINE)	BLACK (AC LINE)	AC 100-277VAC
NEUTRAL	WHITE	AC Neutral/Common
LINE DRIVER	PINK	Relay Controlled AC Output (Switched Line)

Low Voltage Terminal Connections (Isolated)

Signal Name	Wire Color	Description
0-10V_OUT[1]+	PURPLE	User Controllable 0-10VDC (Dimming)
0-10V_OUT[2]+	ORANGE	User Controllable 0-10VDC (CCT)
0-10V_OUT[1&2]-	GRAY	Common Dimming Negative
DC + 24V 50mA	Terminal	24 Volt DC Output
GND-	Terminal	Common Ground
CC_IN	Terminal	24 Volt Sensor Input

Protection/Immunity (non-regulatory)

AC-input/user input and output connections: ESD Level-4 immunity per IEC/EN 61000-4-2

Level	Contact Discharge	Air Discharge
4	±8 kV	±12 kV

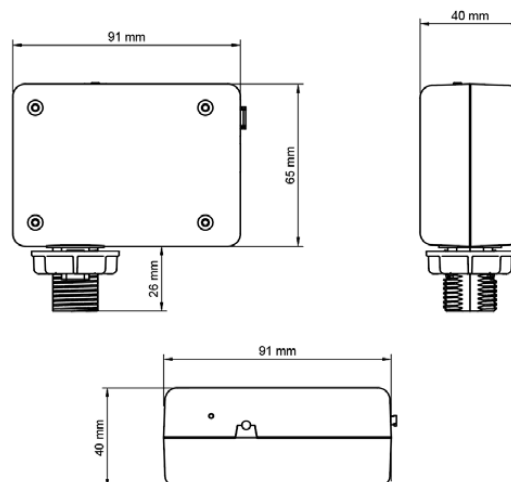
AC-input: EFT and BURSTS immunity IEC/EN 61000-4-4, Class 3 or better ($\leq 2\text{kV}$)

AC-input: SURGE immunity IEC/EN 61000-4-5, Class 3 or better ($\leq 2\text{kV}$)

Certifications

Regulatory	Description
USA	FCC: 2AFZI-AVI1010B
EU	E: 0700 Model: AVI1010-B
Canada	IC: 20544-AVI1010B
BQB	DID: DO31801 Qualified Design ID: 86303
UL (Pending)	UL 60730-1, UL 924, UL 2043

DIMENSIONS



WIRING DIAGRAM

