

2W Miniature Photomultiplier/APD Modules 300V to 2kV

- Photomultiplier tubes & avalanche photo diodes, general purpose
- 300V, 600V, 1kV and 2kV versions
- Positive and negative polarity options
- Remote voltage programming or potentiometer setting
- Voltage monitor & current monitor
- Flashover & short circuit protected
- UL listed



Electrical Specification: 4479 Series

Order Code For 12V Input Types	Order Code For 24V Input Types	Polarity	Output Voltage	Output Current	Connection
4479-101	4479-107	Positive	300V	3mA	Connector
4479-102	4479-108	Positive	600V	3mA	Connector
4479-104	4479-110	Positive	1kV	2mA	Connector
4479-106	4479-112	Positive	2kV	1mA	Connector
4479-2XX	4479-2XX	Negative	As above for negative output		

12V Types	
Input voltage range	+11V to +15Vdc. Maximum input voltage surge <5 seconds is 18V.
Input current	400mA at full load and 125mA at zero load (at 12V).
Control of the output	0 to +5V for 0 to 100% rated output voltage, $Z_{in} = 1M\Omega$. Maximum slew rate: 50V/ms typ.
Fixed reference output	+5V $\pm 0.05\%$. Maximum current: 3mA. Temperature coefficient: 50ppm/ $^{\circ}C$.
Variable reference output	0 to +5V, multi-turn potentiometer.
Voltage monitor	0 to +5V for zero to 100% of output voltage. Accuracy $\pm 1\% \pm 50mV$. $Z_{out} = 10k\Omega$.
Current monitor	0 to +5V for zero to 100% of output current. Accuracy $\pm 1.5\% \pm 50mV$. $Z_{out} = 10k\Omega$.

24V Types	
Input voltage range	+22V to +28V dc. Maximum input voltage surge <5 seconds is 32V.
Input current	250mA at full load and 100mA at zero load (at 24V).
Control of the output	0 to +10V for 0 to 100% rated output voltage, $Z_{in} = 1M\Omega$. Maximum slew rate: 50V/ms typ.
Fixed reference output	+10V $\pm 0.05\%$. Maximum current: 3mA. Temperature coefficient: 50ppm/ $^{\circ}C$.
Variable reference output	0 to +10V, multi-turn potentiometer.
Voltage monitor	0 to +10V for zero to 100% of output voltage. Accuracy $\pm 1\% \pm 50mV$. $Z_{out} = 10k\Omega$.
Current monitor	0 to +10V for zero to 100% of output current. Accuracy $\pm 1.5\% \pm 50mV$. $Z_{out} = 10k\Omega$.

Electrical Specification (12V & 24V Input Types)

High frequency ripple	<6mVp-p, <1mVp-p typical
Low frequency noise	<12mVp-p, <4mVp-p typical
Line regulation	<20ppm over input voltage
Load regulation	<20ppm for zero to full load
Drift (after 1 hour warm up)	<15ppm in any 15 minute period, <50ppm in any 8 hour period
Temperature coefficient	<50ppm/ $^{\circ}C$ at maximum rated output
Protection	Proof against output short circuit (current limited to 110%-180% of max depending on model). Input protected against polarity reversal
Safety approved to	UL1950 Marked

File code: LS_DS_4479-Series_en/09/24

4479 Series

Mechanical Specification

Dimensions	95.2 x 49.0 x 15.0 mm (3.75" x 1.94" x 0.6"). 2 off mounting holes on 88.8mm (3.5") centres
Weight	70g (2.5 oz.) approximately
Input / control	2 off (4 way & 5 way) 0.1" pitch (Molex) connectors
Output	Fly lead, RG178B/U cable 0.5m (19") long also available with RG58 or other types to special order

Environmental Specification

Temperature, operating	-10°C to +50°C	Humidity (RH) <31°C non-condensing	80% maximum
Temperature, storage	-20°C to +75°C	Humidity (RH) >30°C non-condensing	Decrease linearly to 50% at 40°C
Altitude, operating	Up to 2,000m	Altitude, storage	Up to 18,000m

The unit is to be supplied from a current limited supply providing 24V dc, impulse limited to overvoltage Category I (of IEC60364-4-443)
For use in an environment of pollution degree 2.

Pin Assignments

1	Power input (+12V or +24V dc)
2	Power return / 0V
3	Power return / 0V
4	Fixed reference output
5	Control input
6	Variable reference output
7	Voltage monitor
8	Current monitor

Dimensions

Dimensions in mm
Projection/first angle

