

# iMOD® 17V 500F Module

## FEATURES

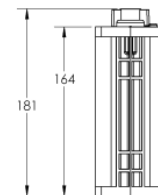
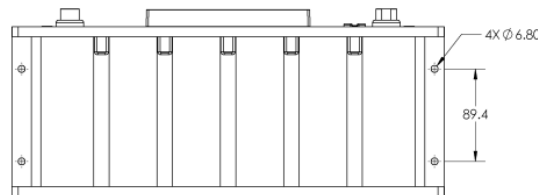
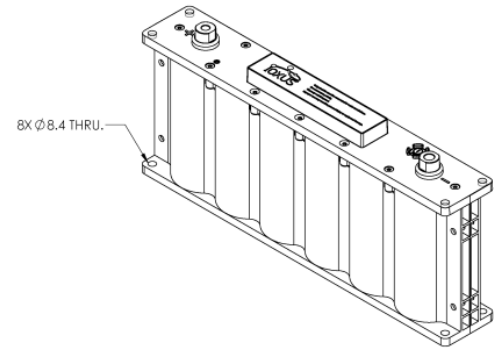
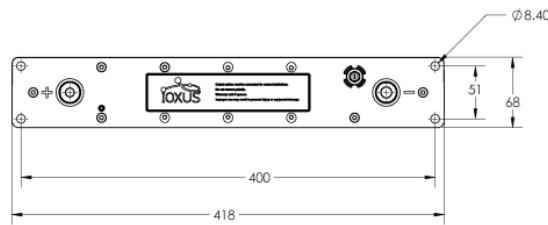
Made in USA  
 IP 65  
 RoHS compliant  
 Long life  
**Wide temperature range**

## APPLICATIONS

High power  
 High rate cycling  
 High cycle life (>1,000,000 cycles)

## MARKETS

Automotive subsystem  
 Engine starting  
 Regen energy capture  
 Backup power  
 UPS/ride through power  
 Wind turbine pitch control



## MARKINGS

Products are marked with the following: Rated capacitance, rated voltage, product number, name of manufacturer, positive and negative terminal marking, and maximum energy content.

## MOUNTING RECOMMENDATION

Do not reverse polarize. Install following recommendations in *Notes on Using Ultracapacitors*, available at [www.ioxus.com](http://www.ioxus.com). Contact your ioxus representative for ordering and application information regarding sizing.

**Corporate Headquarters  
 North American Sales**  
 18 Stadium Circle  
 Oneonta, NY 13820, USA  
 Toll Free: +1-877-751-4222  
 Sales@ioxus.com  
 TEL: 607-441-3500  
 FAX: 607-433-9014

**Ioxus Japan  
 Co. LTD**  
 1381-1 Okamotocho  
 Kusatsu-city, Shiga Pref  
 525-0044, Japan  
 Sales@ioxus.co.jp  
 TEL : +81-77-569-5106  
 FAX: +81-77-569-5168

## PRODUCT SPECIFICATIONS

ELECTRICAL \ PART NUMBER	iMOD017V500A22-01A
Capacitance (F) [Min/ <b>Nom</b> ]	480/ <b>500</b>
Voltage (Rated/Surge) [ <b>V<sub>R</sub></b> / <b>V<sub>S</sub></b> ]	<b>17.0</b> /18.0
DC ESR 10ms (mΩ) [ <b>Nom</b> /Max]	<b>1.5</b> /2.1
IEC DC ESR (mΩ) [ <b>Nom</b> /Max]	<b>1.8</b> /2.3
AC ESR(mΩ 1kHz) [ <b>Nom</b> /Max]	<b>1.4</b> /2.0
Hi Pot Test Voltage	3500VDC
UL Max Operational Voltage (per UL810A)	750VDC
<b>CYCLING</b> (Calculated from nominal values)	
Current, Peak [1s] (A)	2,500
Continuous Current (A) [20° Rise]	TBD
Current, Short Circuit (A)	13,500
<b>THERMAL</b> (Reference)	
<b>Operational</b> / Storage Range (°C)	<b>-40 to 65 °C</b> / -40 to 70 °C
Resistance, Thermal (°C/W) [ <b>R<sub>TH</sub></b> ]	<TBD
<b>ENERGY/POWER</b> (Reference / Calculated using nominal values)	
<b>E<sub>MAX</sub></b> (Whr)	20.1
<b>PHYSICAL</b> (Nominal Values)	
L (mm)	418
W (mm)	68
H (mm) w/Terminals	181
Mass (kg)	5.1
Volume (L)	5.2
<b>Terminal Fastener Size</b> / Max Torque	<b>M8</b> /20Nm & <b>M10</b> /30Nm
<b>LIFE</b> (EOL Criteria) [ <b>Capacitance</b> /IEC DC ESR] *Life is a provisional value	
DC (10 Yr, 25°C, @V <sub>R</sub> ) [ <b>F</b> /mΩ]	> <b>400</b> / <b>&lt;4.6</b>
Endurance (2000hr, 65°C, @V) [ <b>F</b> /mΩ]	> <b>400</b> / <b>&lt;4.6</b>
Storage (2 yr, 25°C, @ 0V) [ <b>F</b> /mΩ]	> <b>450</b> / <b>&lt;3.4</b>
Cycle (1M Cyc, 25°C, @ V -V /2) [ <b>F</b> /mΩ]	> <b>400</b> / <b>&lt;4.6</b>
<b>STANDARDS COMPLIANCE</b>	
Safety/Environmental .....	RoHS, UL810a, Chinese RoHS, IP65
Shock .....	IEC 60068-2-27 (TA1@25g), ISO 16750-3 (4.2.2)
Vibration .....	ISO 16750-3 (Table 14)

Contact the Ioxus sales department for price and availability by writing to [sales@ioxus.com](mailto:sales@ioxus.com) or by calling 1-877-751-4222

### ADDITIONAL TECHNICAL INFORMATION

Product specification test and calculation methods are available in *Ioxus Notes on Datasheet Specifications*

