Pinnacle<sup>™</sup> 10x6 kW

DeviceNet<sup>™</sup>, MDXL User 5702063-C May 2000

Advanced Energy Industries, Inc.

1625 Sharp Point Drive Fort Collins, CO 80525 USA 970.221.4670

technical.support@aei.com







### **User Manual**

Pinnacle™ 10x6 kW

5702063-C





#### **MARNING**

Read this entire manual and all other publications pertaining to the work to be performed before you install, operate, or maintain this equipment. Practice all plant and product safety instructions and precautions. Failure to follow instructions can cause personal injury and/or property damage. All personnel who work with or who are exposed to this equipment must take precautions to protect themselves against serious or possibly fatal bodily injury.

Advanced Energy Industries, Inc., (AE) provides information on its products and associated hazards, but it assumes no responsibility for the after-sale operation of the equipment or the safety practices of the owner or user. This equipment produces or uses potentially lethal high-voltage, high-current, radio frequency (RF) energy. NEVER DEFEAT INTERLOCKS OR GROUNDS.

All information herein is subject to periodic updates. Inquiries concerning this manual should be directed to AE. Information provided by AE is believed to be correct and reliable. However, no responsibility is assumed by AE unless otherwise expressly taken.

ADVANCED is

is a registered trademark of Advanced Energy Industries, Inc.

Advanced Energy is a registered trademark of Advanced Energy Industries, Inc.

**AE** is a registered trademark of Advanced Energy Industries, Inc.

**DeviceNet** is a trademark of Open DeviceNet Vendor Association, Inc, Boca Raton, FL **Pinnacle** is a trademark of Advanced Energy Industries, Inc.

5/2/00<sup>©</sup> Copyright by Advanced Energy Industries Inc. All rights reserved. Without written permission, no part of this manual covered by copyright herein may be reproduced or copied in any form or by any means: graphic, electronic, or mechanical, including photocopying, recording, taping, or information and retrieval systems. Written permission must be granted by:

Advanced Energy Industries, Inc. 1625 Sharp Point Drive Fort Collins, Colorado 80525 USA



## **Table of Contents**

| Chapter 1. | Introduction                 | 1-1         |
|------------|------------------------------|-------------|
|            | Read This Section!           | 1-1         |
|            | Interpreting the Manual      | 1-1         |
|            | Type Conventions             | 1-1         |
|            | Icons (Symbols)              | 1-1         |
|            | Safety                       | 1-3         |
|            | Product Safety/Compliance    | 1-4         |
|            | Directives                   | 1-4         |
|            | Standards                    | 1-4         |
|            | Installation Requirements    | 1-5         |
|            | Conditions of Use            | 1-5         |
| Chapter 2. | Theory                       | 2-1         |
|            | General Description          | 2_1         |
|            | Output Impedance Range       |             |
|            | Output Regulation            |             |
|            | Interfaces.                  |             |
|            | Microprocessor Advantages    |             |
|            | Displays                     |             |
|            | Arc-Suppression Feature      |             |
|            | Theory of Operation          |             |
|            | Input                        |             |
|            | Housekeeping Supply          |             |
|            | Inverter                     |             |
|            | Output                       |             |
|            | Output Measurement           |             |
|            | Logic Control                |             |
|            | Remote Interfaces            |             |
| Cl 4 2     | Con a 26° a 4° a a 4         | 2 -         |
| Cnapter 3. | Specifications               | <b>3-</b> ] |
|            | Functional Specifications.   |             |
|            | Physical Specifications      |             |
|            | Electrical Specifications.   |             |
|            | Environmental Specifications |             |
|            | Coolant Specifications       | 3-1(        |



# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

### **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

#### **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

#### **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

#### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

#### **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

