

Advanced Inverter Mapping: Maintenance, Optimization, and Troubleshooting

London (UK)

10 - 14 November 2025

UK Training

PARTNER



Advanced Inverter Mapping: Maintenance, Optimization, and Troubleshooting

Code: OG28 From: 10 - 14 November 2025 City: London (UK) Fees: 5100 Pound

Introduction

Inverter technology is one of the most important modern technologies used in a wide range of applications, such as air conditioning, electrical appliances, and industrial motors. This technology relies on intelligent control of speed and power through what is known as "inverter maps"—sets of data and software that dictate how the system responds to external variables. Understanding and maintaining inverter maps is critical to ensuring system efficiency and sustainability. This five-day training program provides the latest information and techniques related to inverter map maintenance, including data analysis, settings adjustment, and proactive fault management.

Course Objectives

- Understand the basic principles of inverter maps and how they function in control systems.
- Analyze data and use necessary tools to modify inverter maps for optimal performance.
- Diagnose faults related to inverter maps and apply maintenance strategies to repair them.
- Develop skills to adjust and optimize inverter settings for energy savings and increased operational efficiency.
- Learn about the latest technologies used to monitor and manage inverter maps remotely.
- Implement preventive maintenance practices to ensure the system operates efficiently.
- Use specialized software to monitor and analyze the performance of inverter maps.

Course Outlines

Day 1: Introduction to Inverter Technology and Core Components

- Overview of inverter technology and how it works.
- Key components of an inverter map.
- Applications of inverters in different sectors, such as air conditioning and electric motors.
- The role of inverters in improving the efficiency of electrical and industrial systems.

Day 2: Basic Principles of Speed and Power Control Using Inverters

- Explanation of the concepts of speed and power control through inverters.
- How inverters manage different motor speeds using inverter maps.
- Practical examples of speed and power control in inverter-based systems.

Day 3: Understanding and Analyzing Inverter Map Data

- How to read and analyze inverter map data to extract vital information.
- Software tools used to analyze performance and efficiency.
- Practical case studies for analyzing inverter map data.



Day 4: Adjusting Settings Based on Data Analysis

- How to adjust inverter settings based on data analysis to enhance system performance.
- Strategies for improving system efficiency through proper settings adjustment.
- Hands-on practice: adjusting inverter maps based on analyzed data.

Day 5: Fault Diagnosis and Preventive Maintenance Part 1

- Advanced diagnostic techniques for inverter map-related faults.
- Understanding common inverter issues and how to troubleshoot them.
- Using testing and measurement tools to detect problems in their early stages.

Day 6: Fault Diagnosis and Preventive Maintenance Part 2

- Preventive maintenance strategies to avoid major failures.
- Hands-on exercise: inspecting and analyzing real inverter map faults.
- How to extend system lifespan and reduce unplanned downtime.

Day 7: Enhancing Inverter Performance Part 1

- Techniques to improve inverter performance and adjust settings for optimal results.
- Case studies on improving energy efficiency in systems that rely on inverters.
- Examples of how to reduce losses and increase system lifespan.

Day 8: Enhancing Inverter Performance Part 2

- Continuation of performance improvement techniques and strategies to reduce system losses.
- Further case studies on industrial applications of inverter efficiency improvement.
- Advanced analysis of inverter performance and suggestions for optimization.

Day 9: Remote Monitoring and Control Tools

- Latest software tools for remote monitoring and managing inverter maps.
- How to implement smart monitoring systems for periodic performance analysis.
- Practical exercise: using software to remotely monitor inverter map performance.

Day 10: Future Strategies and Managing Advanced Systems

- Utilizing cloud technologies to manage and maintain inverter maps.
- Future strategies for improving and managing advanced systems using inverters.
- Group discussions and future outlooks on inverter technology and its industrial impact.

Why Attend this Course: Wins & Losses!

- Improved operational efficiency through analyzing inverter maps and adjusting their settings for optimal performance.
- Reduced energy losses and increased energy savings by applying map-based optimizations.
- Preventive maintenance techniques to avoid costly breakdowns and minimize unplanned downtime.



- Learn to use advanced mapping programs and process mapping tools for real-time monitoring and optimization of inverter maps.

Conclusion

This Inverter Map Maintenance course offers a unique opportunity to deepen your understanding of inverter technology and its practical applications. By mastering skills to analyze inverter map data, adjust settings, and diagnose faults, you can optimize operational efficiency and reduce costs. You'll also gain hands-on experience with specialized software for remote inverter monitoring and develop techniques for preventive maintenance to ensure long-term system performance.

Join us to learn the latest in mapping-based optimizations, process mapping, and data mapping for sustainable and efficient systems!



Blackbird Training Cities

Europe



Malaga (Spain)



Sarajevo (Bosnia and Herzegovina)



Oporto (Portugal)



Glasgow (Scotland)



Edinburgh (UK)



Oslo (Norway)



Annecy (France)



Bordeaux (France)



Copenhagen (Denmark)



Birmingham (UK)



Lyon (France)



Moscow (Russia)



Stockholm (Sweden)



Podgorica (Montenegro)



Batumi (Georgia)



London (UK)



Istanbul (Turkey)



Amsterdam



Düsseldorf (Germany)
(Switzerland)



Paris (France)



Athens (Greece)



Barcelona (Spain)



Munich (Germany)



Geneva



Prague (Czech)



Vienna (Austria)



Rome (Italy)



Brussels



Madrid (Spain)



Berlin (Germany)



Lisbon (Portugal)



Zurich



Manchester (UK)



Milan (Italy)



Blackbird Training Cities

USA & Canada



Los Angeles (USA)



Orlando, Florida (USA)



Online



Phoenix, Arizona (USA)



Houston, Texas (USA)



Boston, MA (USA)



Washington (USA)



Miami, Florida (USA)



New York City (USA)



Seattle, Washington (USA)



Washington DC (USA)



In House



Jersey, New Jersey (USA)



Toronto (Canada)

ASIA



Baku (Azerbaijan)
(Thailand)



Maldives (Maldives)



Doha (Qatar)



Manila (Philippines)



Bali (Indonesia)



Bangkok



Beijing (China)



Singapore (Singapore)



Sydney



Tokyo (Japan)



Jeddah (KSA)



Riyadh (KSA)



Melbourne (Australia)
Korea



Phuket (Thailand)



Dubai (UAE)



Kuala Lumpur (Malaysia)



Kuwait City (Kuwait)



Seoul (South)



Pulau Ujong (Singapore)



Irbid (Jordan)



Jakarta (Indonesia)



Amman (Jordan)



Beirut



Blackbird Training Cities

AFRICA



Kigali (Rwanda)



Cape Town (South Africa)



Accra (Ghana)



Lagos (Nigeria)



Marrakesh (Morocco)



Nairobi (Kenya)



Zanzibar (Tanzania)



Tangier (Morocco)



Cairo (Egypt)



Sharm El-Sheikh (Egypt)



Casablanca (Morocco)



Tunis (Tunisia)



Blackbird Training Clients



MANNAI Trading
Company WLL,
Qatar



Alumina Corporation
Guinea



Booking.com
Netherlands



Oxfam GB International
Organization,
Yemen



Capital Markets
Authority,
Kuwait



Waltersmith Petroman Oil Limited
Nigeria



Qatar National Bank
(QNB),
Qatar



Qatar Foundation,
Qatar



AFRICAN UNION ADVISORY
BOARD ON CORRUPTION,
Tanzania



KFAS
Kuwait



Reserve Bank of
Malawi,
Malawi



Central Bank of Nigeria
Nigeria



Ministry of Interior
Kingdom of Saudi Arabia
KSA



Mabruk Oil Company
Libya



Saudi Electricity
Company,
KSA



BADAN PENGELOLA
KEUANGAN Haji,
Indonesia



NATO
Italy



ENI CORPORATE
UNIVERSITY,
Italy



Gulf Bank
Kuwait



المؤسسة العامة للتأمينات الاجتماعية
General Organization for
Social Insurance
KSA



Defence Space Administration
Nigeria



National Industries
Group (Holding),
Kuwait



Hamad Medical
Corporation,
Qatar



USAID
Pakistan



STC Solutions,
KSA



North Oil company,



EKO Electricity



Oman Broadband



UNITED NATIONS
UN.



هيئة تنظيم الكهرباء - عمان
AUTHORITY FOR ELECTRICITY REGULATION, OMAN
Authority for

UK Training
PARTNER



Blackbird Training Categories

Management & Admin

Entertainment & Leisure
Professional Skills
Finance, Accounting, Budgeting
Media & Public Relations
Project Management
Human Resources
Audit & Quality Assurance
Marketing, Sales, Customer Service
Secretary & Admin
Supply Chain & Logistics
Management & Leadership
Agile and Elevation

Technical Courses

Artificial Intelligence (AI)
Hospital Management
Public Sector
Special Workshops
Oil & Gas Engineering
Telecom Engineering
IT & IT Engineering
Health & Safety
Law and Contract Management
Customs & Safety
Aviation
C-Suite Training



International House 185 Tower Bridge
Road London SE1 2UF United Kingdom



+44 7401 1773 35
+44 7480 775526



Sales@blackbird-training.com



www.blackbird-training.com

