

# Iris Power RFAII™

## Periodic On-line Rotor Flux Analyzer

**A second generation advanced tool to find rotor winding shorted turns, during service, in round rotor motors and turbo generators and in salient pole motors and hydro generators**

The portable Iris Power RFAII analyzer is intended for on-line detection of shorted rotor turns on salient pole rotors (Iris Power RFAII-S) and round rotors (Iris Power RFAII-R). In addition to manual measurements, the Iris Power RFAII analyzer is capable of stand-alone data acquisition once it is configured, i.e. without a connected computer, and the collected measurements are saved in its internal memory. The analyzer is compact, simple to use, and user-friendly, while maintaining high resolutions and powerful algorithms.

### SPECIFICATIONS

#### POWER SOURCE

- Voltage: 115/230 V, 50/60 Hz
- Consumption: <100 W

#### COMMUNICATIONS

- USB Port (type B connector), Ethernet Port (RJ45 connector)

#### FLUX SIGNAL INPUTS

- Connectors:
  - BNC for both single ended (1) or differential flux signals (2)
  - 8-pin, polarized, for integrated flux and sync sensor signal (combination probe)
- Signal range: 0.3 V to 48 V
- Impedance: 10 kΩ

#### SYNCHRONIZATION INPUTS

- Sync Sensor
  - Connector: BNC (1)
  - Impedance: > 10 kΩ
  - Range: 1- 24 V peak
- Combination probe (see Flux inputs)
- External ac sync
  - Connectors: banana jack (2)
  - Range: 50 Vac to 237 Vac



### OTHER FEATURES

- Accepts Total Flux probes (Iris Power TFProbe™) and other flux sensors.
- Compatible with Iris Power FluxTracII™ continuous monitors

# IRIS POWER RFAII

## ENVIRONMENTAL CONDITIONS

- Temperature (operating/storage): 0 °C to 40 °C/-20 °C to 50 °C
- Relative humidity: <90 % non-condensing

## FLUX DATA ACQUISITION

	RFAII-R	RFAII-S
Number of rotor poles	Up to 4	4 to 128
Time per measurement	5 s	30 s
Number of measurements (internal memory)	180	300
Measurement mode		
Manual	✓	✓
Based on time	✓	✓
Spin pit	✓	
Based on load	✓	
Digitizer: high-speed, > 80 dB SNR	✓	✓
Measurements at any load	✓	✓

## SYNC SENSOR DATA ACQUISITION

- Targets per revolution Iris Power RFAII-R: 1
- Targets per revolution Iris Power RFAII-S: 3 (0°, 60°, and 180°), for reversible pump-turbines; 1, otherwise

## SOFTWARE

- Iris Power RotorFluxPro™ software for configuration, downloading, and analysis (included with instrument)
- Runs on any computer with MS Windows XP SP3 or later operating system
- Signal simulation utility (included with software)

## CASE

- Protection: IP67
- Latches: 2 (lockable double throw)
- Drop test: up to 2 m
- Certifications: MIL C-4150J, RoHS, ATA 300, Def Stan 81-41/STANAG 4280
- Weight, approximate: 7.5 kg (16 lb)
- Dimensions: 470 mm (18.5") x 357 mm (14.06") x 176 mm (6.93")

CE marked

## ORDER

Part Nr.	Description
M1300	RFAII-R portable flux analyzer for detecting shorted turns in round rotor machines. Includes user manual, manual, connection cables, software and carrying case.
M1310	RFAII-S portable flux analyzer for detecting shorted turns in salient pole machines. Includes user manual, manual, connection cables, software and carrying case.
M1320	RFAII-RS portable flux analyzer for detecting shorted turns in round rotor and salient pole machines. Includes user manual, manual, connection cables, software and carrying case.
C0010	Modular on-site training seminar. Travel time and expenses are extra.

For other options, contact your sales representative

*Iris Power RFAII, Iris Power FluxTracII-R, Iris Power FluxTracII-S, Iris Power RFAII-R, Iris Power RFAII-S, Iris Power RFAII-RS, and Iris Power RotorFluxPro are trademarks of Qualitrol-Iris Power. The TFProbe is patented in the United States and licensed by Qualitrol-Iris Power. Windows is a registered trademark of Microsoft Corporation in the United States and other countries.*

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