

# iTIG IV

## Production Line Test Automation (PLTA)

The iTIG IV's Production Line Test Automation (PLTA) option is the easiest and most cost-effective way to automate production line testing for coil and motor manufacturers.

- Cover all your production line insulation testing needs with one instrument.
- Powerful and immediate test result analysis.
- Remote operation, automatic data transfer, and full integration with test equipment allows for fully automatic testing without operator assistance.
- Test coils or motors against a pre-stored master or against a defined set of limits and tolerances.



4kV



6-15kV

## What PLTA option is best for your testing needs?

### PLTA Script File: Advanced test error analysis

Expand the standard Pass/Fail limits to include verification of nominal Inductance (L) and Resistance (R), and PD measurements.

### PLTA-3: Pre-stored master coil testing, barcode scanning, and PLC controls

Expand the capabilities of the D model to include higher levels of automation for use with single coil/motor types or with multi-model production lines. Enables fast and efficient testing against pre-stored master coils/motors. Use a barcode scanner and PLC to further automate the process.

### PLTA-3-20: Add RS-232 serial controls.

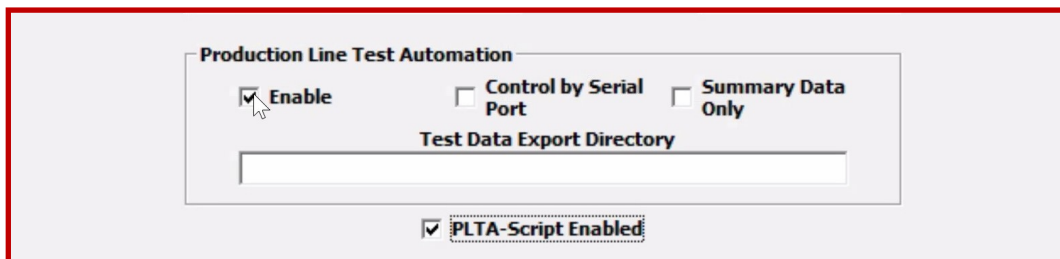
Fully integrate with your production line. This option adds RS-232 serial controls to PLTA-3 and is used for coil/motor selection, serial number and temperature input.

### PLTA Script File: Advanced test error analysis

Add this software option to any iTIG IV Model D for a more detailed test error analysis. Expand the standard limits check to indicate Pass/Fail on variables defined in the Test Summaries file. Perform additional calculations, tolerance and limits checks to automatically identify and record if the device under test meets the design criteria.

For example, indicate out-of-tolerance variables otherwise not included in the standard Pass/Fail analysis such as nominal Inductance (L) and Resistance (R), and Partial Discharge.

- Gives the instrument immediate visibility to the measured values from the most recent test for expanded test error analysis.
- Define the design criteria for each Motor ID/motor type tested.
- Perform complex calculations easily.
- Signal faults to an operator or Programmable Logic Controller (PLC) and log them in the Test Summaries file.



**Instrument Test Screen with PLTA option:  
Enable PLTA-Script for advanced test error analysis**

## PLTA-3: Pre-stored master coil testing, barcode scanning, and PLC controls

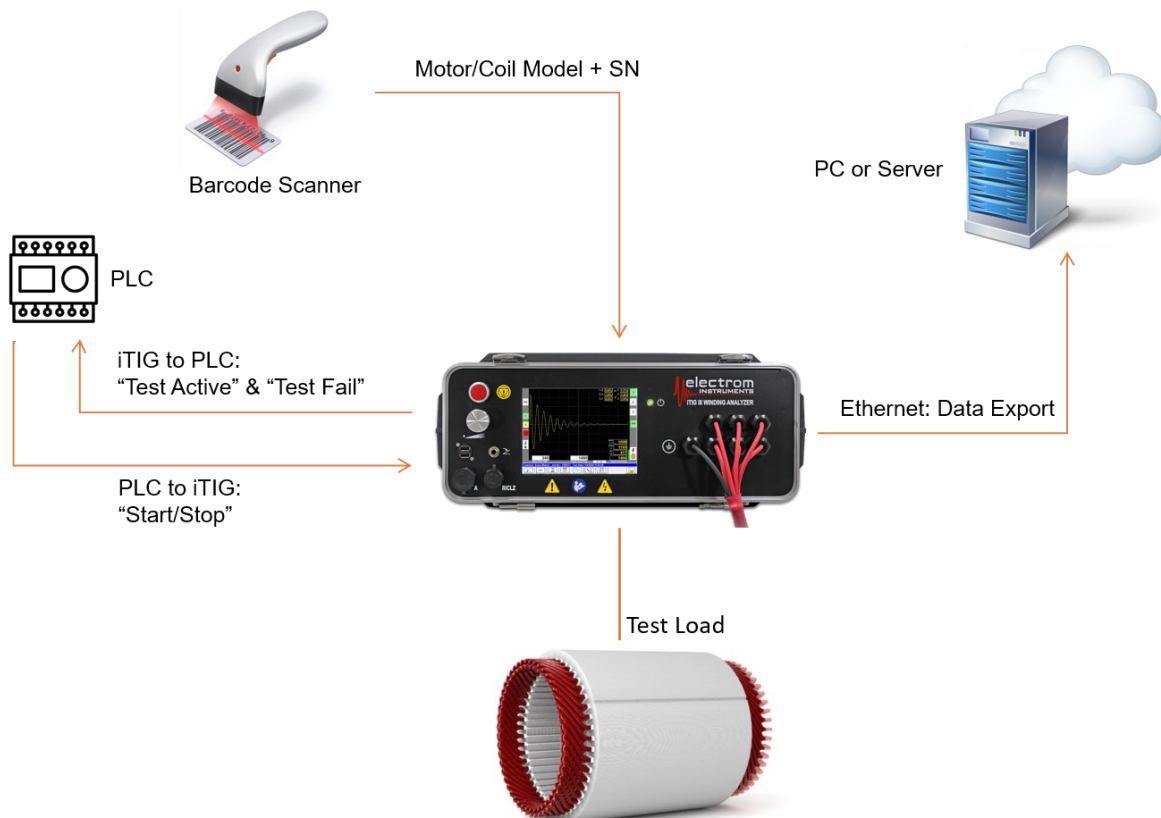
Use a barcode scanner to select the device under test and input serial number information quickly. The barcode scanner along with dry contact closures can remotely start/stop tests and indicate active tests and Pass/Fail results. PLTA-3 is typically used for testing of large numbers of identical coils or motors, and for multi-model production lines with automatic selection of test programs and serial number input.

All the features of PLTA-Script plus:

- Scan barcodes to automatically select Motor Model and enter Serial Numbers
- Single motor/coil testing without serial number recording let users repeat a specified test sequence against a pre-stored master with minimal initial setup and no mid-testing adjustment.
- Pre-program full test sequences with specific limits for any number of coil/motor types and use the barcode scanner to select and initiate the test, mitigating user/operator errors. Simply scan the barcode and start the test set.
- Use either the standard start/stop button or footswitch, or enable remote start/stop with an external latching switch or PLC.
- Receive “Test Active” and “Fail” signals through dry contact closures for use with safety lights, pass/fail indicators or external PLCs.
- Data export through ethernet included.



**Barcode Scanner**

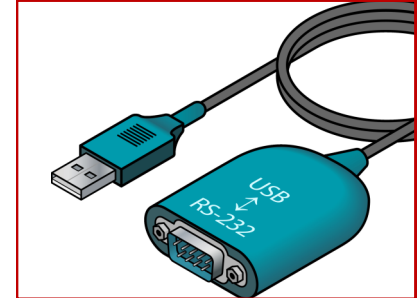


## PLTA-3-20: RS-232 serial controls for full integration with your production line

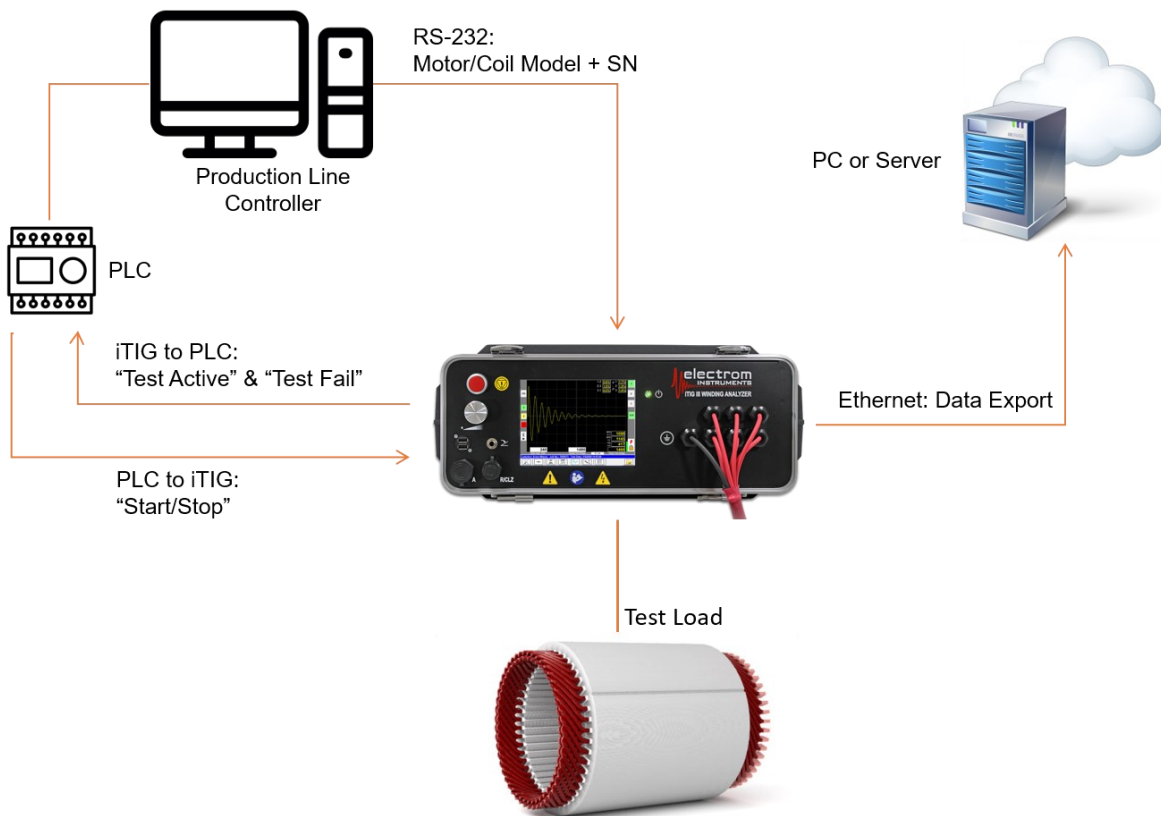
Select the Motor ID/motor type and include serial number and winding temperature via RS-232 serial controls. This option is typically used in fully integrated production line test systems where the use of a human operator is eliminated. Integrate with ONE unit and cover all your insulation testing needs.

All the features of PLTA-3 plus:

- Easily integrate with the iTIG through RS-232 serial controls for data input. Use a standard DB-9 to USB serial controls cable. The USB end connects to the iTIG and the DB-9 to the PC/controller.
- Dry contact closures will indicate the test status, failed tests, and allow for remote start/stop.
- Data can be automatically exported to a remote PC or server through an Ethernet connection
- Allows for automatic updating of winding temperature through the serial control.



**DB-9 to USB serial controls cable**



Electrom Instruments does not offer test beds, test enclosures, or pneumatic clamps for automatic connection to test loads. For more information on how to integrate the iTIG IV to match your system requirements contact your Electrom sales representative.