

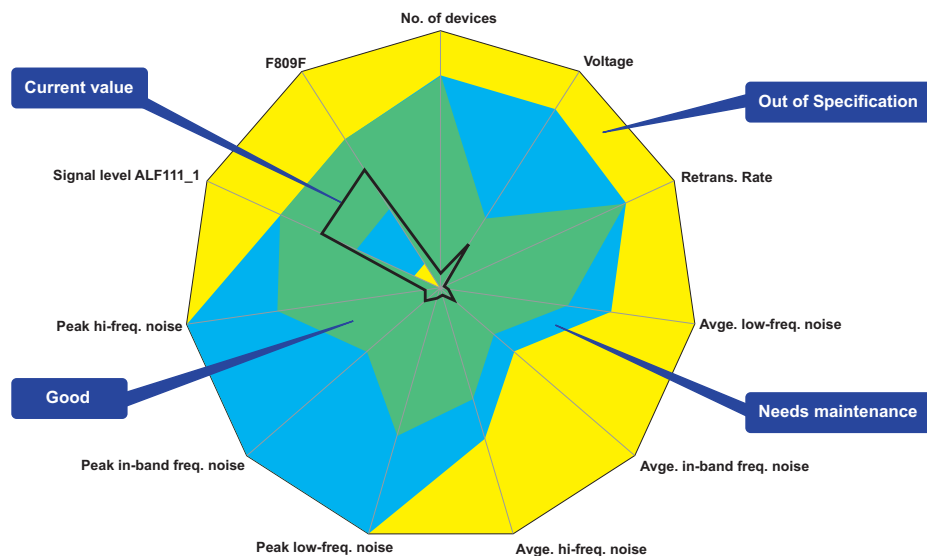


technical datasheet

F809F Device Type Manager

Diagnostic module interface

- Simple user interface with status, instrument technician and advanced user views
- Alarm optimisation wizard
- NAMUR NE107 compliant status display
- Tooltips for any active alarms recommend corrective action
- Free download from MTL website



MTL's F809F on-line diagnostic module now supports FDT/DTM technology, which not only simplifies the commissioning process but also provides longer term benefits in the maintenance of the fieldbus segments.

The F809F DTM (Device Type Manager) provides three levels of user display:

- a simple display of the status of each segment
- a more detailed view of the parameters, together with any alerts for the instrument technician and
- an advanced user view with configuration options.

FDT/DTM technology standardizes the communications interface between field devices and their control systems. Aside from using the Microsoft Windows operating system, it is completely independent of both the normal communication protocol and the software environment of either the device or host system. It therefore makes it easier for all instruments, devices, calibrators, asset management software, and control systems to work together.

The FDT (Field Device Tool) part of the interface is essentially the specification describing the standardized data exchange between the field devices and control system,

engineering or asset management tools, while the DTM is the user interface for accessing device parameters, configuring the device, and diagnosing problems.

The DTM device driver is developed by the manufacturer of the device and can range from a simple Graphical User Interface for setting device parameters to a highly sophisticated application capable of performing complex real-time calculations for diagnosis and maintenance purposes.

Automation software that supports the FDT interface can work with any device DTM in the same way that Windows uses Printer drivers.

EPS F809F-DTM Rev1 070510

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To assist users who may use DTMs from many different device manufacturers the FDT Group has developed a DTM Style Guide. The F809F DTM has been designed to follow this style guide to ensure that the end user enjoys maximum clarity through the use of clear, standardised diagnostic alerts.

For this reason, the F809F DTM has been designed to comply with NAMUR NE107 specification for *Self-Monitoring and Diagnosis of Field Devices*. The NAMUR specification provides the following four categories for diagnostic alerts from field devices.

- Maintenance required
- Out of specification
- Check function
- Failure

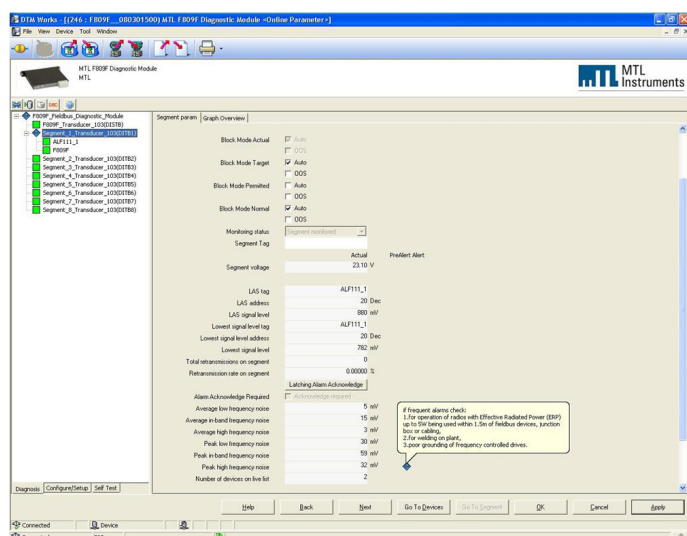
These categories are represented by colours and symbols as shown here.

NE107	Farben	Formen	Farben + Formen
Wartungsbedarf: (Maintenance required)		oder 	oder 
Außerhalb der Spezifikation: (Out of specification)		oder 	oder 
Funktionskontrolle: (Check function)		oder 	oder 
Ausfall: (Failure)		oder 	oder 

NAMUR NE107 diagnostic alert categories

The F809F DTM displays the NAMUR NE107 symbol while providing a summary of the status of the system and all 8 Segment Transducer Blocks on the home page. Additionally, a summary of status is displayed on each segment or device page together with alerts as indicated by the appropriate NAMUR NE107 symbol.

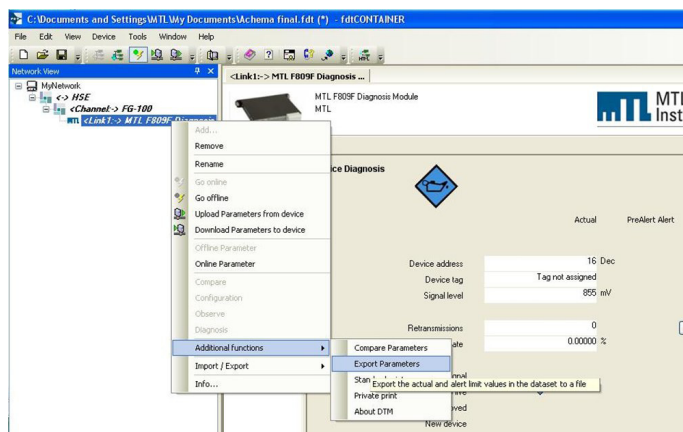
An expandable tree view shows the system, segment and devices with NAMUR NE107 status. To simplify the user interface only devices that have been connected to a fieldbus segment are included in the segment tree.



The default alert limits for the F809F are based on the fieldbus specification. The F809F DTM provides an Alarm Optimisation Wizard which sets pre-alert limits closer to the actual value. The pre-alerts are categorised as *Maintenance required* and alerts are categorised as *Out of specification*.

Hovering the mouse over a parameter reveals tooltips providing further information and for active alarms recommends corrective action to be taken.

On completion of commissioning a summary report of fieldbus segment status and current values is easily printed to provide an excellent record of the segment condition.



Also, the current values and alarm limits can be exported and it is normal practice to save a baseline of data as part of the commissioning procedure. The F809F DTM compare function will allow a comparison of the current values against the start up baseline or any other dataset.

The All in One Graph (see below and front) can provide a visual summary in colour for a selected fieldbus segment, clearly showing the Current Values (black line), Good performance (Green areas), Pre-alert limits (Blue areas) and Alert (Yellow areas) for the key segment and device parameters, making it easy to identify any segments with marginal conditions that require further investigation.

