# 800xA - Device Management PROFIBUS

# Device Type PR electronics Pretop 5350 Version 2.1

# **Release Notes**

## Introduction

This document represents the release notes for the device type *PR electronics Pretop* 5350.

This document provides a brief overview on functionality. It also enumerates known problems encountered in the final interoperability testing with the related device hardware, and identifies workarounds that help overcome the problem. The document contains additional notes that may be valuable to customers and service personnel working with this device type.

# **Device Type Details**

Table 1. Device Type Details

| Vendor                     | PR electronics |
|----------------------------|----------------|
| Device Type                | Pretop 5350    |
| Category                   | Temperature    |
| Protocol                   | PROFIBUS PA    |
| PNO ID                     | 0x5350         |
| GSD File Version / Date    | 3 / 12.09.2003 |
| Hardware/Software Revision | (1)            |

<sup>(1)</sup> For the interoperability test with the physical device the listed hardware and software revision has been used. The user has to verify that the connected device meets above version requirements or is compatible with above versions.

## **New in this Version**

Table 2. Revision History

| Library Wizard Name               | Changes   |
|-----------------------------------|---|
| PR electronics PRETOP5350 V1.0-PA | First Release.  |
|                                   | Available with 2PAA100044_A_en_DeviceObjectType_PR_Electronics_PRETOP5350_v1_0_PA.Zip |
| PR electronics PRETOP5350 V1.0-PA | SAP Connectivity included.  |
|                                   | Support for SV5.0 and Higher included.  |
|                                   | Available with 2PAA100044_B_en_DeviceObjectType_PR_Electronics_PRETOP5350_v1_0_PA.exe |

Table 2. Revision History

| Library Wizard Name               | Changes   |
|-----------------------------------|---|
| PR electronics PRETOP5350 V2.0-PA | Device Specific DTM included.  Available with  2PAA100044_C_en_DeviceObjectType_PR_Electronics_PRETOP5350_v2_0_PA.exe |
| PR electronics PRETOP5350 V2.1-PA | Updated with new DTM. Available with 2PAA100044S01_x_en_DeviceObjectType_PR_El ectronics_PRETOP5350_V2_1_PA.exe       |

The above version will result in device object type PRE\_PRETOP5350\_YP0\_v2\_0 if installed in SV4.1 Rollups Released April 2008 or higher, but less than System 800xA 5.0.

If installed in System 800xA 5.0 SP1 or higher it will result in Hardware Library PRE\_PRETOP5350\_PA Version 2.1-0.

# **Supported System**

Table 3. System 800xA (pre System 800xA 5.0)

| System Requirements                       | 800xA SV4.1 Rollups Released April 2008 or higher system versions (but less then System 800xA 5.0) |
|---|--|
| Hardware Definition File                  | YP005350_v2_0.hwd  |
| Supported Controller /<br>PROFIBUS Master | Controller AC 800M / CI 854(A)   |
| Supported Linking Devices                 | LD 800P / SK1 <sup>(2)</sup>   |

Table 4. System 800xA (System 800xA 5.0 onwards)

| System Requirements                    | 800xA System 800xA 5.0 SP1 or higher system versions <sup>(1)</sup> |
|--|---|
| Hardware Library                       | PRE_PRETOP5350_PA Version 2.1-0                                     |
| Supported Controller / PROFIBUS Master | Controller AC 800M / CI 854(A)                                      |
| Supported Linking Devices              | LD 800P / SK1 <sup>(2)</sup>  |

- Check ABB SolutionsBank for Field Notification, to find out if this device type has any further limitations.
- (2) The Segment Coupler SK1 can be used only, if the PROFIBUS master is set to the following settings:

Baudrate: 93.75 kbits/s Max Tsdr: 1000 Min\_Slave\_Interval: 250.

IMPORTANT: The Release Notes of each PROFIBUS device type installable with the Device Library Wizard include the parameter Min\_Slave\_Interval. use the maximum value among all slaves of a bus line in case of SK1 operation. In case of self created PROFIBUS device object types via GSD Import Wizard the value for Min\_Slave\_Interval is listed in the corresponding GSD file.

### Restrictions

PROFIBUS device types are created by ABB and tested for use in the 800xA system in connection with Device Management PROFIBUS & HART. ABB creates these device types based on data provided by individual device vendors (e.g. EDDs, GSDs, device-specific Device Type Managers (DTMs) and Asset Monitor behavior specifications), which ABB relies on as accurately reflecting the actual device specification and behavior. Therefore, ABB cannot assume liability for events that are caused by devices that are not functioning according to fieldbus standards, or device specifications, or for events that are caused by mismatches between the device behavior and the input data provided by the device vendor.

Device types installed via Device Library Wizard cannot be used or instantiated if the associated DTM is not installed.

### Installation



This object type can be installed with the Device Library Wizard tool only. For more details, please refer to ABB Device Library Wizard, User Instructions (3BDD011857R0101) in SV4.1 and ABB Device Library Wizard, User Instructions (2PAA102573R5011) in System 800xA 5.0 SP1.

# **Device Type, Modules and Channels**

Since System 800xA version 5.0 onwards the implementation and usage of PROFIBUS device types is different to previous 800xA system versions. Main difference between pre System 800xA 5.0 and System 800xA 5.0 is not to have object types for device types and corresponding modules, but to have a hardware library.

For detailed information, please refer to the specific system documentation for configuration and operation of PROFIBUS device types.

Table 5 lists the device type and corresponding module types.



System 800xA 5.0 onwards all released device and module types are included in the hardware library of the device type.

Table 5. Module/Device Types according to GSD

| Object Type   | Description   |
|---|---|
| Pre System 800xA 5.0:<br>PRE_PRETOP5350_YP0_v2_0      | Device object type(Slave), must be configured first with associated PROFIBUS address.                 |
| System 800xA 5.0 Onwards:<br>PRE_PRETOP5350_PA        |   |
| Pre System 800xA 5.0: PRE_PRETOP5350_Yv2_Empty Module | Module does not contain any bytes. This is a empty module, which can be used as a placeholder module. |
| System 800xA 5.0 Onwards:<br>Empty Module             |   |
| Pre System 800xA 5.0:<br>PRE_PRETOP5350_Yv2_AI_Short  | Module contains the following 5 bytes data structure with 5 bytes input and 0 bytes output.  Inputs:  |
| System 800xA 5.0 Onwards:<br>Analog Input (AI) short  | 4 Bytes>Real - Temperature Value 2 Byte>Dint - Status   |
| Pre System 800xA 5.0: PRE_PRETOP5350_Yv2_AI_Long      | Module contains the following 5 bytes data structure with 5 bytes input and 0 bytes output.  Inputs:  |
| System 800xA 5.0 Onwards:<br>Analog Input (AI) long   | 4 Bytes>Real - Temperature Value 1 Byte>Dint - Status   |

# **Device Object Type Functionality in 800xA**



For details on PROFIBUS device configuration, refer to IndustrialIT 800xA - Device Management, PROFIBUS, Configuration Device (3BDD011750R4101) in SV4.1 and Device Management, PROFIBUS & HART, Configuration (3BDD011934R5011) in System 800xA 5.0 SP1.

#### **Documentation**

Please select the following aspects in *Product Documentation* aspect to view documentation related to this device type.

- 1. Certificate of Compliance CSA
- 2. Certificate of Compliance UL
- 3. Configuration Manual
- 4. Profibus Certficate
- 5. Declaration of confirmity
- 6. Product data sheet
- 7. EC Type Examination Certifiates.

## **Device Diagnostics in Control Builder M**

Each unit of an device object type has a variable of type Hardware Status (HwStatus). The HwStatus type is displayed as 32 bit integer value for

ErrorsAndWarnings (EW) and ExtendedStatus (ES). Table 6 shows the supported diagnostics information provided by the device.

Table 6. Device Diagnostics

| Status Bit                                      | HW-<br>Status         | Value       | Diagnostics<br>Information            | Warning<br>/Error | Alarm<br>/Event | Severity |
|---|-----------------------|-------------|---------------------------------------|-------------------|-----------------|----------|
| Standard Diagnostics (Available at slave level) |                       |             |                                       |                   |                 |          |
| DeviceSpecific1                                 | ErrorsAnd<br>Warnings | 16#80000000 | Hardware electronic failure           | Error             | Alarm           | High     |
| DeviceSpecific2                                 | ErrorsAnd<br>Warnings | 16#4000000  | Hardware<br>mechanics<br>failure      | Error             | Alarm           | High     |
| DeviceSpecific3                                 | ErrorsAnd<br>Warnings | 16#20000000 | Memory error                          | Error             | Alarm           | High     |
| DeviceSpecific4                                 | ErrorsAnd<br>Warnings | 16#10000000 | Power supply failed                   | Error             | Alarm           | High     |
| DeviceSpecific5                                 | ErrorsAnd<br>Warnings | 16#08000000 | Measurement failure                   | Error             | Alarm           | High     |
| DeviceSpecific6                                 | ErrorsAnd<br>Warnings | 16#04000000 | Zero point error                      | Error             | Alarm           | High     |
| DeviceSpecific7                                 | ErrorsAnd<br>Warnings | 16#02000000 | Motor<br>temperature too<br>high      | Warning           | Alarm           | Medium   |
| DeviceSpecific8                                 | ErrorsAnd<br>Warnings | 16#01000000 | Electronic<br>temperature too<br>high | Warning           | Alarm           | Medium   |
| DeviceSpecific9                                 | ErrorsAnd<br>Warnings | 16#00800000 | Device not initialized                | Warning           | Alarm           | Medium   |

Table 6. Device Diagnostics

| Status Bit       | HW-<br>Status         | Value       | Diagnostics<br>Information                | Warning<br>/Error | Alarm<br>/Event | Severity |
|------------------|-----------------------|-------------|---|-------------------|-----------------|----------|
| DeviceSpecific10 | ErrorsAnd<br>Warnings | 16#00400000 | Ident_Number violation                    | Warning           | Alarm           | Medium   |
| ExtendedStatus1  | Extended<br>Status    | 16#00000001 | Slave does not exist                      | Error             | Alarm           | Medium   |
| ExtendedStatus2  | Extended<br>Status    | 16#00000002 | Configuration data fault                  | Error             | Alarm           | High     |
| ExtendedStatus3  | Extended<br>Status    | 16#00000004 | Parameter data fault                      | Error             | Alarm           | High     |
| ExtendedStatus4  | Extended<br>Status    | 16#00000008 | Static diagnostic                         | Warning           | Alarm           | Low      |
| ExtendedStatus5  | Extended<br>Status    | 16#00000010 | Redundant slave does not exist            | Warning           | Alarm           | Medium   |
| ExtendedStatus6  | Extended<br>Status    | 16#0000020  | Diagnostic<br>configuration<br>data fault | Warning           | Alarm           | Medium   |
| ExtendedStatus7  | Extended<br>Status    | 16#00000040 | Report<br>Diagnostics fault               | Warning           | Alarm           | Medium   |
| ExtendedStatus8  | Extended<br>Status    | 16#00000080 | Configuration invalid                     | Error             | Alarm           | High     |
| ExtendedStatus9  | Extended<br>Status    | 16#00000100 | Characteristics invalid                   | Error             | Alarm           | Medium   |
| ExtendedStatus10 | Extended<br>Status    | 16#00000200 | Ident_Number violation                    | Error             | Alarm           | Medium   |
| ExtendedStatus11 | Extended<br>Status    | 16#00000400 | Coldstart                                 | Warning           | Event           | Medium   |
| ExtendedStatus12 | Extended<br>Status    | 16#00000800 | Restart                                   | Warning           | Event           | Medium   |

| Status Bit       | HW-<br>Status      | Value       | Diagnostics<br>Information | Warning<br>/Error | Alarm<br>/Event | Severity |
|------------------|--------------------|-------------|----------------------------|-------------------|-----------------|----------|
| ExtendedStatus13 | Extended<br>Status | 16#00001000 | Maintenance required       | Warning           | Event           | Medium   |
| ExtendedStatus14 | Extended<br>Status | 16#00002000 | Extension<br>Available     | Warning           | Alarm           | Medium   |

Table 6. Device Diagnostics

# **Device Type Manager (DTM)**

The DTM will be installed during setup of the device type via Device Library Wizard. User interactions may be required during installation or post installation. For more details, refer to section Installation on page 5 in this document.

Table 7. Device Type Manager

| DTM Type       | Device Specific DTM (Pretop 5350 DTM) |
|----------------|---------------------------------------|
| Version / Date | 1.20.1006 / May 6, 2008               |
| FDT Version    | 1.2                                   |
| Vendor         | PR electronics                        |
| DTM License    | Not Required                          |

# **Asset Optimization**

This functionality requires installation of 800xA Asset Optimization software and can be used if the corresponding system extensions have been loaded.



For more details, please refer to AO Configuration manual (3BUA000118R4101) and AO Operation manual (3BUA000150R4101).

Asset Optimization functionality for this device is available in aspect Profibus Generic Asset Monitor.

Table 8. Asset Optimization Functionality

| Asset Monitor(s)        | Profibus Generic Asset Monitor |
|-------------------------|--------------------------------|
| Asset Reporter / Viewer | Yes (On Master)                |
| CMMS Connectivity       | Maximo, SAP <sup>(1)</sup>     |

<sup>(1)</sup> SAP web view that allows direct interaction with the data is not a released functionality. Hence this access is not available.

Table 9. Asset Monitor Conditions

| SI.<br>No. | Conditions <sup>(1)</sup> | Supported |  |
|------------|---------------------------|-----------|--|
| Hardw      | are Status                |           |  |
| 1          | ОК                        | Х         |  |
| 2          | Electronic failure        | X         |  |
| 3          | Mechanical failure        | Х         |  |
| 4          | Memory error              | Х         |  |
| 5          | Power supply failed       | Х         |  |
| 6          | Failure                   | X         |  |
| Measu      | Measurement Status        |           |  |

Table 9. Asset Monitor Conditions

| SI.<br>No.          | Conditions <sup>(1)</sup>       |   |  |  |
|---------------------|---------------------------------|---|--|--|
| 7                   | OK                              | Х |  |  |
| 8                   | Measurement failure             | Х |  |  |
| 9                   | Zero point error                | Х |  |  |
| 10                  | Failure                         | Х |  |  |
| Tempe               | erature Warning                 |   |  |  |
| 11                  | No                              | Х |  |  |
| 12                  | Motor temperature too high      |   |  |  |
| 13                  | Electronic temperature too high |   |  |  |
| 14                  | Failure                         |   |  |  |
| Device              | Device Status                   |   |  |  |
| 15                  | Initialized                     | Х |  |  |
| 16                  | Not initialized                 | Х |  |  |
| 17                  | Initialization failed           | Х |  |  |
| 18                  | Disconnected                    | Х |  |  |
| 19                  | Cold Startup                    | Х |  |  |
| 20                  | Warm Startup                    |   |  |  |
| 21                  | Failure                         |   |  |  |
| Configuration Error |                                 |   |  |  |
| 22                  | No                              | Х |  |  |
| 23                  | Configuration invalid           | Х |  |  |
| 24                  | Characteristics invalid         | Х |  |  |

Table 9. Asset Monitor Conditions

|            |                                     | ted       |  |
|------------|-------------------------------------|-----------|--|
| SI.<br>No. | Conditions <sup>(1)</sup>           | Supported |  |
| 25         | Parameter data fault                | Х         |  |
| 26         | Ident_Number violation              | Х         |  |
| 27         | Failure                             | Х         |  |
| Genera     | General Warning                     |           |  |
| 28         | No                                  | Х         |  |
| 29         | Device needs maintenance            | Х         |  |
| 30         | Diagnostic Data extension available | Х         |  |
| 31         | Failure                             | Х         |  |

Conditions derived via PROFIBUS standard diagnostics defined in PROFIBUS PA profile 3 specification.

## **Fixed Problems**

Table 10 lists the critical or major issues that have been corrected since the previous version. A brief description of the correction is also been given.

Table 10. Fixed Problems

| Issue Fixed   | Description                |
|---|----------------------------|
| When the DTM is opened online and if the device is disconnected the DTM status is not changing and no error is displayed.                     | Fixed in this DTM version. |
| The DTM does not differentiate between Plant Explorer user roles. This is observed only in SV4.1 system.                                      | Fixed in this DTM version. |
| In a multi user environment, device parameters can be changed unintentionally because the DTM does not support a lock distribution mechanism. | Fixed in this DTM version. |

## **Known Problems**

Table 11 lists issues that may exist and affect the operation of the device type at time of release. Workarounds, clarifications, or helpful hints have been provided for each issue wherever possible.

Table 11. Known Problems

| Issue   | Workaround  |  |  |
|---|---|--|--|
| No option to cancel the data set change.<br>Old data set is lost.   | Upload from the device to get back old data set.                |  |  |
| DTM accepts illegal parameter configuration. After download of invalid configuration the incorrect parameter becomes 0. | Check configuration in the DTM manually of incorrect parameter. |  |  |

Table 11. Known Problems (Continued)

| Issue  | Workaround                                       |  |  |
|--|--|--|--|
| During installation DTM asks for restart.              | Restart the machine.                             |  |  |
| During upload/download DTM parameters can be modified. | Do not modify parameters during upload/download. |  |  |

# **Support**

Contact ABB technical support for assistance in problem reporting.



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# 800xA - Device Management PROFIBUS

# Device Type PR electronics Pretrans 6350 Version 2.1

## **Release Notes**

## Introduction

This document represents the release notes for the device type *PR electronics Pretrans* 6350.

This document provides a brief overview on functionality. It also enumerates known problems encountered in the final interoperability testing with the related device hardware, and identifies workarounds that help overcome the problem. The document contains additional notes that may be valuable to customers and service personnel working with this device type.

# **Device Type Details**

Table 1. Device Type Details

| Vendor                     | PR electronics                       |
|----------------------------|--------------------------------------|
| Device Type                | Pretrans 6350                        |
| Category                   | Temperature                          |
| Protocol                   | PROFIBUS PA                          |
| PNO ID                     | 0x6350                               |
| GSD File Version / Date    | 3 / 12.09.2003                       |
| Hardware/Software Revision | 63509002 / V2.03 PA01 <sup>(1)</sup> |

<sup>(1)</sup> For the interoperability test with the physical device the listed hardware and software revision has been used. The user has to verify that the connected device meets above version requirements or is compatible with above versions.

## **New in this Version**

Table 2. Revision History

| Library Wizard Name                 | Changes   |
|-------------------------------------|---|
| PR electronics PRETRANS6350 V1.0-PA | First Release.  |
|                                     | Available with 2PAA100046_A_en_DeviceObjectType_PR_Electr onics_PRETRANS6350_v1_0_PA.Zip  |
| PR electronics PRETRANS6350 V1.0-PA | SAP Connectivity included.     Support for SV5.0 and Higher included.  Available with  2PAA100046_B_en_DeviceObjectType_PR_Electronics_PRETRANS6350_v1_0_PA.exe |

Table 2. Revision History

| Library Wizard Name                 | Changes   |
|-------------------------------------|---|
| PR electronics PRETRANS6350 V2.0-PA | DTM included.  Available with  2PAA102029_A_en_DeviceObjectType_PR_Electr onics_PRETRANS6350_v2_0_PA.exe          |
| PR electronics PRETRANS6350 V2.1-PA | Updated with new DTM. Available with 2PAA102029S01_x_en_DeviceObjectType_PR_El ectronics_PRETRANS6350_v2_1_PA.exe |

The above version will result in device object type PRE\_PRETOP6350\_YP0\_v2\_0 if installed in SV4.1 Rollups Released April 2008 or higher, but less than System 800xA 5.0.

If installed in System 800xA 5.0 SP1 or higher it will result in Hardware Library PRE\_PRETRANS6350\_PA Version 2.1-0.

# **Supported System**

Table 3. System 800xA (pre System 800xA 5.0)

| System Requirements                    | 800xA SV4.1 Rollups Released April 2008 or higher system versions (but less then System 800xA 5.0) |  |  |
|--|--|--|--|
| Hardware Definition File               | YP006350_v2_0.hwd  |  |  |
| Supported Controller / PROFIBUS Master | Controller AC 800M / CI 854(A)   |  |  |
| Supported Linking Devices              | LD 800P / SK1 <sup>(2)</sup>   |  |  |

Table 4. System 800xA (System 800xA 5.0 onwards)

| System Requirements                       | 800xA System 800xA 5.0 SP1 or higher system versions <sup>(1)</sup> |
|---|---|
| Hardware Library                          | PRE_PRETRANS6350_PA Version 2.1-0                                   |
| Supported Controller /<br>PROFIBUS Master | Controller AC 800M / CI 854(A)                                      |
| Supported Linking Devices                 | LD 800P / SK1 <sup>(2)</sup>  |

- Check ABB SolutionsBank for Field Notification, to find out if this device type has any further limitations.
- (2) The Segment Coupler SK1 can be used only, if the PROFIBUS master is set to the following settings:

Baudrate: 93.75 kbits/s Max Tsdr: 1000 Min\_Slave\_Interval: 250.

IMPORTANT: The Release Notes of each PROFIBUS device type installable with the Device Library Wizard include the parameter Min\_Slave\_Interval. use the maximum value among all slaves of a bus line in case of SK1 operation. In case of self created PROFIBUS device object types via GSD Import Wizard the value for Min\_Slave\_Interval is listed in the corresponding GSD file.

### Restrictions

PROFIBUS device types are created by ABB and tested for use in the 800xA system in connection with Device Management PROFIBUS & HART. ABB creates these device types based on data provided by individual device vendors (e.g. EDDs, GSDs, device-specific Device Type Managers (DTMs) and Asset Monitor behavior specifications), which ABB relies on as accurately reflecting the actual device specification and behavior. Therefore, ABB cannot assume liability for events that are caused by devices that are not functioning according to fieldbus standards, or device specifications, or for events that are caused by mismatches between the device behavior and the input data provided by the device vendor.

Device types installed via Device Library Wizard cannot be used or instantiated if the associated DTM is not installed.

### Installation



This object type can be installed with the Device Library Wizard tool only. For more details, please refer to ABB Device Library Wizard, User Instructions (3BDD011857R0101) in SV4.1 and ABB Device Library Wizard, User Instructions (2PAA102573R5011) in System 800xA 5.0 SP1.

# **Device Type, Modules and Channels**

Since System 800xA version 5.0 onwards the implementation and usage of PROFIBUS device types is different to previous 800xA system versions. Main difference between pre System 800xA 5.0 and System 800xA 5.0 is not to have object types for device types and corresponding modules, but to have a hardware library.

For detailed information, please refer to the specific system documentation for configuration and operation of PROFIBUS device types.

Table 5 lists the device type and corresponding module types.



System 800xA 5.0 onwards all released device and module types are included in the hardware library of the device type.

Table 5. Module/Device Types according to GSD

| Object Type   | Description   |
|---|---|
| Pre SV5.0:<br>PRE_PRETRANS6350_YP0_v2_0                 | Device object type(Slave), must be configured first with associated PROFIBUS address.                 |
| SV5.0 Onwards: PRE_PRETRANS6350_PA                      |   |
| Pre System 800xA 5.0: PRE_PRETRANS6350_Yv2_Empty Module | Module does not contain any bytes. This is a empty module, which can be used as a placeholder module. |
| System 800xA 5.0 Onwards:<br>Empty Module               |   |
| Pre System 800xA 5.0: PRE_PRETRANS6350_Yv2_AI_Short     | Module contains the following 5 bytes data structure with 5 bytes input and 0 bytes output.  Inputs:  |
| System 800xA 5.0 Onwards:<br>Analog Input (AI) short    | 4 Bytes>Real - Temperature Value 2 Byte>Dint - Status   |
| Pre System 800xA 5.0: PRE_PRETRANS6350_Yv2_AI_Long      | Module contains the following 5 bytes data structure with 5 bytes input and 0 bytes output.  Inputs:  |
| System 800xA 5.0 Onwards:<br>Analog Input (AI) long     | 4 Bytes>Real - Temperature Value 1 Byte>Dint - Status   |

# **Device Object Type Functionality in 800xA**



For details on PROFIBUS device configuration, refer to IndustrialIT 800xA - Device Management, PROFIBUS, Configuration Device (3BDD011750R4101) in SV4.1 and Device Management, PROFIBUS & HART, Configuration (3BDD011934R5011) in System 800xA 5.0 SP1.

#### **Documentation**

Please select the following aspects in *Product Documentation* aspect to view documentation related to this device type.

- 1. Configuration Manual.
- 2. Profibus Certificate.
- 3. Type Examination Certificate.
- 4. Declaration of Conformity.
- 5. Installation & Operating Instructions.
- 6. Technical Information.
- 7. Data sheet.

## **Device Diagnostics in Control Builder M**

Each unit of an device object type has a variable of type Hardware Status (HwStatus). The HwStatus type is displayed as 32 bit integer value for

ErrorsAndWarnings (EW) and ExtendedStatus (ES). Table 6 shows the supported diagnostics information provided by the device.

Table 6. Device Diagnostics

| Status Bit                                      | HW-<br>Status         | Value       | Diagnostics<br>Information            | Warning<br>/Error | Alarm<br>/Event | Severity |
|---|-----------------------|-------------|---------------------------------------|-------------------|-----------------|----------|
| Standard Diagnostics (Available at slave level) |                       |             |                                       |                   |                 |          |
| DeviceSpecific1                                 | ErrorsAnd<br>Warnings | 16#80000000 | Hardware electronic failure           | Error             | Alarm           | High     |
| DeviceSpecific2                                 | ErrorsAnd<br>Warnings | 16#4000000  | Hardware<br>mechanics<br>failure      | Error             | Alarm           | High     |
| DeviceSpecific3                                 | ErrorsAnd<br>Warnings | 16#20000000 | Memory error                          | Error             | Alarm           | High     |
| DeviceSpecific4                                 | ErrorsAnd<br>Warnings | 16#10000000 | Power supply failed                   | Error             | Alarm           | High     |
| DeviceSpecific5                                 | ErrorsAnd<br>Warnings | 16#08000000 | Measurement failure                   | Error             | Alarm           | High     |
| DeviceSpecific6                                 | ErrorsAnd<br>Warnings | 16#04000000 | Zero point error                      | Error             | Alarm           | High     |
| DeviceSpecific7                                 | ErrorsAnd<br>Warnings | 16#02000000 | Motor<br>temperature too<br>high      | Warning           | Alarm           | Medium   |
| DeviceSpecific8                                 | ErrorsAnd<br>Warnings | 16#01000000 | Electronic<br>temperature too<br>high | Warning           | Alarm           | Medium   |
| DeviceSpecific9                                 | ErrorsAnd<br>Warnings | 16#00800000 | Device not initialized                | Warning           | Alarm           | Medium   |

Table 6. Device Diagnostics

| Status Bit       | HW-<br>Status         | Value       | Diagnostics<br>Information                | Warning<br>/Error | Alarm<br>/Event | Severity |
|------------------|-----------------------|-------------|---|-------------------|-----------------|----------|
| DeviceSpecific10 | ErrorsAnd<br>Warnings | 16#00400000 | Device initialization failed              | Warning           | Alarm           | Medium   |
| ExtendedStatus1  | Extended<br>Status    | 16#00000001 | Slave does not exist                      | Error             | Alarm           | Medium   |
| ExtendedStatus2  | Extended<br>Status    | 16#00000002 | Configuration data fault                  | Error             | Alarm           | High     |
| ExtendedStatus3  | Extended<br>Status    | 16#00000004 | Parameter data fault                      | Error             | Alarm           | High     |
| ExtendedStatus4  | Extended<br>Status    | 16#00000008 | Static diagnostic                         | Warning           | Alarm           | Low      |
| ExtendedStatus5  | Extended<br>Status    | 16#00000010 | Redundant slave does not exist            | Warning           | Alarm           | Medium   |
| ExtendedStatus6  | Extended<br>Status    | 16#0000020  | Diagnostic<br>configuration<br>data fault | Warning           | Alarm           | Medium   |
| ExtendedStatus7  | Extended<br>Status    | 16#00000040 | Report<br>Diagnostics fault               | Warning           | Alarm           | Medium   |
| ExtendedStatus8  | Extended<br>Status    | 16#00000080 | Configuration invalid                     | Error             | Alarm           | High     |
| ExtendedStatus9  | Extended<br>Status    | 16#00000100 | Characteristics invalid                   | Error             | Alarm           | Medium   |
| ExtendedStatus10 | Extended<br>Status    | 16#00000200 | Ident_Number violation                    | Error             | Alarm           | Medium   |
| ExtendedStatus11 | Extended<br>Status    | 16#00000400 | Coldstart                                 | Warning           | Event           | Medium   |
| ExtendedStatus12 | Extended<br>Status    | 16#00000800 | Restart                                   | Warning           | Event           | Medium   |

Table 6. Device Diagnostics

| Status Bit       | HW-<br>Status      | Value       | Diagnostics<br>Information | Warning<br>/Error | Alarm<br>/Event | Severity |
|------------------|--------------------|-------------|----------------------------|-------------------|-----------------|----------|
| ExtendedStatus13 | Extended<br>Status | 16#00001000 | Maintenance required       | Warning           | Event           | Medium   |
| ExtendedStatus14 | Extended<br>Status | 16#00002000 | Extension<br>Available     | Warning           | Alarm           | Medium   |

# **Device Type Manager (DTM)**

The DTM will be installed during setup of the device type via Device Library Wizard. User interactions may be required during installation or post installation. For more details, refer to section Installation on page 5 in this document.

Table 7. Device Type Manager

| DTM Type       | Device Specific DTM (Pretrans 6350) |
|----------------|-------------------------------------|
| Version / Date | 1.20.1006 / May 6, 2008             |
| FDT Version    | 1.2                                 |
| Vendor         | PR electronics                      |
| DTM License    | Not Required                        |

# **Asset Optimization**

This functionality requires installation of 800xA Asset Optimization software and can be used if the corresponding system extensions have been loaded.



For more details, please refer to AO Configuration manual (3BUA000118R4101) and AO Operation manual (3BUA000150R4101).

Asset Optimization functionality for this device is available in aspect Profibus Generic Asset Monitor.

Table 8. Asset Optimization Functionality

| Asset Monitor(s)        | Profibus Generic Asset Monitor |
|-------------------------|--------------------------------|
| Asset Reporter / Viewer | Yes (On Master)                |
| CMMS Connectivity       | Maximo, SAP <sup>(1)</sup>     |

<sup>(1)</sup> SAP web view that allows direct interaction with the data is not a released functionality. Hence this access is not available.

Table 9. Asset Monitor Conditions

| SI.<br>No. | Conditions <sup>(1)</sup> | Supported |
|------------|---------------------------|-----------|
| Hardw      | are Status                |           |
| 1          | ОК                        | Х         |
| 2          | Electronic failure        | Х         |
| 3          | Mechanical failure        | Х         |
| 4          | Memory error              | Х         |
| 5          | Power supply failed       | Χ         |
| 6          | Failure                   | Х         |

Table 9. Asset Monitor Conditions

| SI.<br>No. | Conditions <sup>(1)</sup>       | Supported |
|------------|---------------------------------|-----------|
| Measu      | rement Status                   |           |
| 7          | ОК                              | X         |
| 8          | Measurement failure             | X         |
| 9          | Zero point error                | X         |
| 10         | Failure                         | X         |
| Tempe      | rature Warning                  |           |
| 11         | No                              | X         |
| 12         | Motor temperature too high      | X         |
| 13         | Electronic temperature too high | Х         |
| 14         | Failure                         | X         |
| Device     | Status                          |           |
| 15         | Initialized                     | Х         |
| 16         | Not initialized                 | Х         |
| 17         | Initialization failed           | Х         |
| 18         | Disconnected                    | Х         |
| 19         | Cold Startup                    | Х         |
| 20         | Warm Startup                    | X         |
| 21         | Failure                         | Х         |
| Config     | uration Error                   | •         |
| 22         | No                              | Х         |
| 23         | Configuration invalid           | Х         |

Table 9. Asset Monitor Conditions

| SI.<br>No. | Conditions <sup>(1)</sup>           | Supported |
|------------|-------------------------------------|-----------|
| 24         | Characteristics invalid             | Х         |
| 25         | Parameter data fault                | Х         |
| 26         | Ident_Number violation              | X         |
| 27         | Failure                             | X         |
| Genera     | General Warning                     |           |
| 28         | No                                  | X         |
| 29         | Device needs maintenance            | Х         |
| 30         | Diagnostic Data extension available | Х         |
| 31         | Failure                             | Х         |

Conditions derived via PROFIBUS standard diagnostics defined in PROFIBUS PA profile 3 specification.

## **Fixed Problems**

Table 10 lists the critical or major issues that have been corrected since the previous version. A brief description of the correction is also been given.

Table 10. Fixed Problems

| Issue Fixed   | Description                |
|---|----------------------------|
| When the DTM is opened online and if the device is disconnected the DTM status is not changing and no error is displayed.                     | Fixed in this DTM version. |
| The DTM does not differentiate between Plant Explorer user roles. This is observed only in SV4.1 system.                                      | Fixed in this DTM version. |
| In a multi user environment, device parameters can be changed unintentionally because the DTM does not support a lock distribution mechanism. | Fixed in this DTM version. |

## **Known Problems**

Table 11 lists issues that may exist and affect the operation of the device type at time of release. Workarounds, clarifications, or helpful hints have been provided for each issue wherever possible.

Table 11. Known Problems

| Issue   | Workaround  |
|---|---|
| No option to cancel the data set change.<br>Old data set is lost.   | Upload from the device to get back old data set.                |
| DTM accepts illegal parameter configuration. After download of invalid configuration the incorrect parameter becomes 0. | Check configuration in the DTM manually of incorrect parameter. |

Table 11. Known Problems (Continued)

| Issue  | Workaround                                       |
|--|--|
| During installation DTM asks for restart.              | Restart the machine.                             |
| During Upload download DTM parameters can be modified. | Do not modify parameters during upload/download. |

# **Support**

Contact ABB technical support for assistance in problem reporting.



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