

MIB Specification

WJ-NX400 Series

Nov.1st, 2018

Document Version: 1.03

Panasonic Corporation
Connected Solutions Company
Security Systems Business Division

Version History

| Version | Date of issue | Description |
|---------|---------------|---|
| 1.03 | 2018.Nov.01 | Add Model (WJ-NX400 Series) First Version for WJ-NX400 |

Limitation of liability

THIS PUBLICATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THE THIRD PARTY'S RIGHT.

THIS PUBLICATION COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE ADDED TO THE INFORMATION HEREIN, AT ANY TIME, FOR THE IMPROVEMENTS OF THIS PUBLICATION AND/OR THE CORRESPONDING PRODUCT (S).

Disclaimer of warranty

IN NO EVENT SHALL Panasonic Corporation BE LIABLE TO ANY PARTY OR ANY PERSON, EXCEPT FOR REPLACEMENT OR REASONABLE MAINTENANCE OF THE PRODUCT, FOR THE CASES, INCLUDING BUT NOT LIMITED TO BELOW:

- (1) ANY DAMAGE AND LOSS, INCLUDING WITHOUT LIMITATION, DIRECT OR INDIRECT, SPECIAL, CONSEQUENTIAL OR EXEMPLARY, ARISING OUT OF OR RELATING TO THIS PUBLICATION AND/OR THE CORRESPONDING PRODUCT (S);
- (2) PERSONAL INJURY OR ANY DAMAGE CAUSED BY INAPPROPRIATE USE OR NEGLIGENT OPERATION OF THE USER;
- (3) UNAUTHORIZED DISASSEMBLE, REPAIR OR MODIFICATION OF THE CORRESPONDING PRODUCT (S) BY THE USER;
- (4) ANY PROBLEM, CONSEQUENTIAL INCONVENIENCE, OR LOSS OR DAMAGE, ARISING OUT OF THE SYSTEM COMBINED BY THE DEVICES OF THIRD PARTY;
- (5) ANY CLAIM OR ACTION FOR DAMAGES, BROUGHT BY ANY PERSON OR ORGANIZATION BEING A PHOTOGENIC SUBJECT, DUE TO VIOLATION OF PRIVACY WITH THE RESULT OF THAT SURVEILLANCECAMERA'S PICTURE, INCLUDING SAVED DATA, FOR SOME REASON, BECOMES PUBLIC OR IS USED FOR THE PURPOSE OTHER THAN SURVEILLANCE.

Table of contents

| | |
|--|-----------|
| 1. INTRODUCTION | 4 |
| 2. OUTLINE | 4 |
| 2.1. MIB STRUCTURE | 5 |
| 3. COMMON MIB (MIB-2) | 7 |
| 3.1. SYSTEM | 7 |
| 3.2. INTERFACE | 8 |
| 3.3. IP | 9 |
| 4. PRIVATE MIB | 10 |
| 4.1. PANASONIC COMMON MIB | 10 |
| 4.2. PssSSD COMMON MIB (COMMON) | 11 |
| 4.3. PssSSD COMMON MIB (ACCESS LOG) | 12 |
| 4.4. PssSSD COMMON MIB (NETWORK LOG) | 14 |
| 4.4.1. <i>Protocol type of network log type</i> | 14 |
| 4.4.2. <i>Network log category</i> | 15 |
| 4.4.3. <i>Network log type</i> | 15 |
| 4.5. DISK RECORDER CATEGORY COMMON MIB (EVENT LOG) | 17 |
| 4.5.1. <i>Event log type</i> | 17 |
| 4.5.2. <i>Port number in the back of Recorder</i> | 18 |
| 4.6. DISK RECORDER CATEGORY COMMON MIB (ERROR LOG) | 19 |
| 4.6.1. <i>Error log type</i> | 20 |
| 4.6.2. <i>Error log unit number</i> | 23 |
| 4.6.3. <i>Error log Disk number/Channel number/Port number/Areanumber/Fan number</i> | 24 |
| 4.7. DISK RECORDER CATEGORY COMMON MIB (HDD INFORMATION) | 31 |
| 4.8. DISK RECORDER CATEGORY COMMON MIB (REBOOT STATUS) | 35 |
| 4.9. DISK RECORDER CATEGORY COMMON MIB (CAMERA CONNECTION STATUS) | 35 |
| 4.10. DISK RECORDER CATEGORY COMMON MIB (TEMPERATURE) | 36 |
| 5. COMMUNITY | 37 |
| 6. RECORDER SNMP SETTINGS | 37 |
| 7. MIB UNDER ENTERPRISES | 37 |

1. **Introduction**

This document is described about a part of MIB information of NX series, ND/NV series.

Important:

The Live image view to PC might stop for a few ten seconds when the load is put on the communication between NX series, ND/NV series - PC as the MIB is downloaded in bulk. However recording is continued.

2. **Outline**

The MIB information to be implemented is Read only, and Set/Write is impossible.

2.1. MIB structure

| Category | Object name | Description |
|-----------------------|-------------|--|
| Common MIB (MIB-2) | System | <ul style="list-style-type: none"> -Model No. Software version -Vender OID -The time since the network management portion of the system was last re-initialized -The contact person for this managed node -An administratively-assigned name for this managed node -The physical location of this node -A value which indicates the set of services that this entity primarily offers |
| | Interface | <ul style="list-style-type: none"> -The number of LAN interface -Index of LAN interface -Information about LAN interface -The type of LAN interface -MAC address |
| | Ip | <ul style="list-style-type: none"> -IPv4 address -Index of interface as IPv4 address -Subnet mask of interface as IPv4 address |
| Private MIB | Panasonic | <ul style="list-style-type: none"> -vendor name -Model number -Current date and time -Serial number |
| | SSD | <ul style="list-style-type: none"> -The number of user access -The number of alarm |
| | | <ul style="list-style-type: none"> -The number of Access log -Index of Access log -The date and time of Access log -Access log type |
| | | <ul style="list-style-type: none"> -The number of Network log -Index of Network log -The date and time of Network log -Network log type |

| Category | Object name | Description |
|-------------|-------------|---|
| Private MIB | HDR | -The number of Event log -Index of Event log -The date and time of Event log -Event log type |
| | | -The number of Error log -Index of Error log -The date and time of Error log -Error log type |
| | | -HDD capacity -HDD hour meter |
| | | -Reboot status |
| | | -Camera connection |
| | | |

3. Common MIB (MIB-2)

Important:

About MIB which is not defined with this document, it is Linux standard MIB.

It is not guaranteed about the contents.

3.1. system

MIB-2=1.3.6.1.2.1

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|-------------|-------------------------------|--------|----------|--|--|
| 1 | sysDescr | DisplayString (size0..255) | RO | MIB2.1.1 | Model No. Software version | e.g. WJ-NX400 SWVer2.00 |
| 2 | sysObjectID | ObjectIdentifir | RO | MIB2.1.2 | Vender OID | 1.3.6.1.4.1.258.510 0. 200 (Fix) |
| 4 | sysContact | DisplayString (size0..255) | RO | MIB2.1.4 | The contact person for this managed node, information on how to contact this person. | NULL *This item can be set from Recorder menu on browser. |
| 5 | sysName | DisplayString (size0..255) | RO | MIB2.1.5 | An administratively-assigned name for this managed node. This is the node's fully-qualified domain name. | NULL *This item can be set from Recorder menu on browser. |
| 6 | sysLocation | DisplayString (size0..255) | RO | MIB2.1.6 | The physical location of this node. | NULL *This item can be set from recorder menu on browser. |
| 7 | sysServices | Integer (0..127) | RO | MIB2.1.7 | A value which indicates the set of services that this entity primarily offers. | 64 (Fix) |

3.2. Interface

MIB2=1.3.6.1.2.1

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|--------------|-------------------------------------|--------|----------------|-------------------------------------|---|
| 8 | ifNumber | Integer (0..127) | RO | MIB2.2.1 | The number of LAN interface | HD600:4 NV200:3 NX400:4 NX200/NX300:3 NX100:2 |
| 9 | ifIndex | InterfaceIndex | RO | MIB2.2.2.1.1.1 | Index of LAN interface (1) | 1 (Fix) |
| | | | RO | MIB2.2.2.1.1.2 | Index of LAN interface (2) | 2 (Fix) |
| | | | RO | MIB2.2.2.1.1.3 | Index of LAN interface (3) | 3 (Fix) |
| | | | RO | MIB2.2.2.1.1.4 | Index of LAN interface (4) | 4 (Fix) |
| 10 | IfDescr | DisplayString (SIZE (0..255)) | RO | MIB2.2.2.1.2.1 | Information about LAN interface (1) | eth0 (Fix) |
| | | | RO | MIB2.2.2.1.2.2 | Information about LAN interface (2) | eth1 (Fix) |
| | | | RO | MIB2.2.2.1.2.3 | Information about LAN interface (3) | eth2 (Fix) |
| | | | RO | MIB2.2.2.1.2.4 | Information about LAN interface (4) | eth3 (Fix) |
| 11 | ifType | InterfaceIndex | RO | MIB2.2.2.1.3.1 | The type of LAN interface (1) | ethernet-csmacd(6) (Fix) |
| | | | RO | MIB2.2.2.1.3.2 | The type of LAN interface (2) | ethernet-csmacd(6) (Fix) |
| | | | RO | MIB2.2.2.1.3.3 | The type of LAN interface (3) | ethernet-csmacd(6) (Fix) |
| | | | RO | MIB2.2.2.1.3.4 | The type of LAN interface (4) | ethernet-csmacd(6) (Fix) |
| 12 | ifPhyAddress | InterfaceIndex | RO | MIB2.2.2.1.6.1 | MAC address of eth0 | MAC address of Device (Fix) |
| | | | RO | MIB2.2.2.1.6.2 | MAC address of eth1 | MAC address of Device (Fix) |
| | | | RO | MIB2.2.2.1.6.3 | MAC address of eth2 | MAC address of Device (Fix) |

*) Eth0 is a camera port in the back of Recorder.

*) Eth1 is a Client PC port in the back of Recorder.

*) Eth2 is a Maintenance port in the front of Recorder.

3.3. IP

MIB2=1.3.6.1.2.1

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|--------------------|---------------------|--------|-------------------------------|--|-----------------|
| 13 | ipAdEntAddr | IpAddress | RO | MIB2.4.20.1.1. ipv4address | IPv4 address of eth0 | 192.168.0.250 |
| | | | RO | MIB2.4.20.1.1. ipv4address | IPv4 address of eth1 | 192.168.1.250 |
| | | | RO | MIB2.4.20.1.1. ipv4address | IPv4 address of eth2 | 192.168.2.250 |
| 14 | ipAdEntIndex | Integer (0..127) | RO | MIB2.4.20.1.2. ipv4address | Index of eth0 as IPv4 address | 1 |
| | | | RO | MIB2.4.20.1.2. ipv4address | Index of eth1 as IPv4 address | 2 |
| | | | RO | MIB2.4.20.1.2. ipv4address | Index of eth2 as IPv4 address | 3 |
| 15 | ipAdEntNetM ask | IpAddress | RO | MIB2.4.20.1.3. ipv4address | Subnet mask of this index of IPv4 address | 255.255.255.0 |
| | | | RO | MIB2.4.20.1.3. ipv4address | Subnet mask of this index of IPv4 address | 255.255.255.0 |
| | | | RO | MIB2.4.20.1.3. ipv4address | Subnet mask of this index of IPv4 address | 255.255.255.0 |

4. Private MIB

4.1. Panasonic common MIB

Panasonic=1.3.6.1.4.1.258

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|------------------------------------|-------------------------------------|--------|--------------------|---|--|
| 1 | panaNceEqG eneralVendor Name | DisplayString (SIZE (0..255)) | RO | Panasonic.1.2.1.1 | The vendor name of the net appliance | Panasonic |
| 2 | panaNceEqG eneralModel | DisplayString (SIZE (0..255)) | RO | Panasonic.1.2.1.2 | The model number of the net appliance | WJ-NX400 WJ-NX200 WJ-NX300 WJ-NX100 |
| 3 | panaNceEqG eneralDayTim e | DateAndTime | RO | Panasonic.1.2.1.10 | The current date and time set on the net appliance | |
| 4 | panaNceEqG eneralSerialN um | DisplayString (SIZE (0..255)) | RO | Panasonic.1.2.1.13 | The serial number of the net appliance | Serial number of device |

4.2. PssSSD common MIB(common)

PssSSD common MIB is shown as follows. Security common MIB is under 1.3.6.1.4.1.258.5100.

PssSSD =1.3.6.1.4.1.258.5100 (PssSSD Common is described SSD.1)

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|-----------------|---------|--------|------------|---|-----------------|
| 5 | UserAccessCount | Integer | RO | PssSSD.1.1 | The number of user that accesses device via network (0-99) | 0 |
| 6 | AlarmSumNum | Integer | RO | PssSSD.1.2 | Counting the number of alarm from device boot. Counting from 0 to 4294967295 with 32bit. When exceed Max value, count from 0 again. *) Not counting emergency recording. | 0 |

4.3. PssSSD common MIB(Access log)

Common log is 1.3.6.1.4.1.258.5100.3, and there are two kinds of log.

- * Access log
- * Network log

Network Disk Recorder has Event log and Trouble log in addition to the above Access log and Network log. Event log and Trouble log do not belong to Security common MIB, belong to HDR.

PssSSD=1.3.6.1.4.1.258.5100 (PssSSD is described PssSSD.1.3)

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|---------------|--------------------------------|--------|----------------------|--|-----------------|
| 7 | AccLogNumber | Integer | RO | PssSSD.1.3.1 | The number of Access log (1-500) | 0 |
| 8 | AccLogIndex | Integer (1...500) | RO | PssSSD.1.3.2. 1.1 | Index of Access log | 1-500 |
| 9 | AccLogDayTime | DateAndTime | RO | PssSSD.1.3.2. 1.2 | The date and time of Access log "e.g. 02-10-29 12:00:00" | 0 |
| 10 | AccLogType | DisplayString (SIZE0...255) | RO | PssSSD.1.3.2. 1.3 | "Access type"- "User name" *There is a detail as follows. | 0 |

*Important: About Access log, Network log, Event log, and Trouble log

Recorder always acquires the maximum log number. (If one log remains, 0 padding and acquires the maximum number.)

“Access type “ - ”Username“

Access Type

| Category | Access type | Access type No. |
|--------------|---------------|-----------------|
| Login/Logout | Login | 001 |
| | Logout | 002 |
| | Config Login | 007 |
| | Config Logout | 008 |

Username

| Username | Value |
|---------------------|--------------------------|
| Browser access user | Registered username |
| PC access user | Registered username |
| FTP access user | Registered username |
| Non displayed | Display only Access type |

4.4. PssSSD common MIB (Network log)

Network log is shown as follows.

PssSSD=1.3.6.1.4.1.258.5100 (PssSSD is described PssSSD.1.3)

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|---------------|--------------------------------|--------|---------------|---|-----------------|
| 11 | NetLogNumber | Integer | RO | SSD.1.3.3 | The number of network log (1-100) | 0 |
| 12 | NetLogIndex | Integer (1...100) | RO | SSD.1.3.4.1.1 | Index of network log | 1-100 |
| 13 | NetLogDayTime | DisplayString (SIZE0...255) | RO | SSD.1.3.4.1.2 | The date and time of network log "e.g. 02-10-29 12:00:00" | 0 |
| 14 | NetLogType | DisplayString (SIZE0...255) | RO | SSD.1.3.4.1.3 | Network log type "Protocol type"- "Category"- "Log type" *There is a detail in next page. | 0 |

4.4.1. Protocol type of network log type

| Protocol type | Protocol type No. | |
|---------------|-------------------|-------|
| | Value | Range |
| SMTP | 00 | 00~99 |
| FTP | 01 | 00~99 |
| DDNS | 02 | 00~99 |
| NTP | 03 | 00~99 |
| SNMP | 04 | 00~99 |
| DHCP | 05 | 00~99 |
| HTTP | 06 | 00~99 |
| LINK_ERROR_01 | 09 | 00~99 |
| Other | 99 | 00~99 |

4.4.2. Network log category

| Category | Category No. | |
|----------------|--------------|-------|
| | Value | Range |
| Success | 00 | 00~99 |
| POP3 Error | 01 | 00~99 |
| SMTP Error | 02 | 00~99 |
| FTP Error | 03 | 00~99 |
| Connect Error | 04 | 00~99 |
| Internal Error | 05 | 00~99 |

4.4.3. Network log type

| Network log type | Type No. | "Protocol type"- "Category"- "Log type" |
|-----------------------|----------|---|
| | Value | |
| SMTPMAIL_SEND | 00 | 00-00-00 |
| <SMTP>POP3_ATTEST_ERR | 01 | 00-01-01 |
| <SMTP>SMTP_ATTEST_ERR | 57 | 00-02-57 |
| SMTPPOP3ADD_ERR | 02 | 00-05-02 |
| SMTPPOP3SVR_ERR | 03 | 00-04-03 |
| SMTPSVRADD_ERR | 04 | 00-05-04 |
| SMTPSVR_ERR | 05 | 00-04-05 |
| SMTPMAILFROM_ERR | 06 | 00-02-06 |
| SMTPRCPTTO_ERR | 07 | 00-02-07 |
| SMTPOTHER | 08 | 00-05-08 |
| FTPCLIENT_OK | 09 | 01-00-09 |
| FTPSVRFWD_OK | 10 | 01-00-10 |
| FTPSVRADD_ERR | 11 | 01-03-11 |
| FTPSVR_ERR | 12 | 01-03-12 |
| FTPUPLOAD_ERR | 13 | 01-04-13 |
| FTPPASSIVE_ERR | 14 | 01-04-14 |
| FTPLOGIN_FAULT | 16 | 01-03-16 |

| Network log type | Type No. | "Protocol type"- "Category"- "Log type" |
|------------------------|----------|---|
| | Value | |
| FTPOTHER | 20 | 01-05-20 |
| DDNSIPADDUPDATE_OK | 21 | 02-00-21 |
| DDNSSVRRES_ERR | 22 | 02-04-22 |
| DDNSUSERPASS_ERR | 23 | 02-04-23 |
| DDNSIPADDUPDATE_ERR | 24 | 02-04-24 |
| DDNSOTHER | 25 | 02-05-25 |
| DDNSSVRADD_ERR | 59 | 02-04-59 |
| DDNSHOSTNAME_ERR | 60 | 02-04-60 |
| DDNSMVSVRADD_ERR | 61 | 02-04-61 |
| DDNSMVSVR_ERR | 62 | 02-04-62 |
| DDNSMVSEND_ERR | 63 | 02-04-63 |
| DDNSMVOTHER | 64 | 02-05-64 |
| NTPGETTIME_OK | 26 | 03-00-26 |
| NTPSVRADD_ERR | 27 | 03-05-27 |
| NTPTIME_INVALID | 30 | 03-05-30 |
| NTPSETTIME_ERR | 31 | 03-05-31 |
| NTPSVRRES_ERR | 32 | 03-05-32 |
| NTPOTHER | 33 | 03-05-33 |
| SNMPUSERPASS_ERR | 35 | 04-05-35 |
| SNMPOTHER | 37 | 04-05-37 |
| DHCPADD_IP_ADD | 38 | 05-00-38 |
| DHCPADDUPDATE_ERR | 40 | 05-04-40 |
| <DHCP>DUPLICATE_IP_ADD | 58 | 05-04-58 |
| DHCPOTHER | 42 | 05-05-42 |
| HTTPUSERPASS_ERR | 45 | 06-04-45 |
| HTTPDOWNLOAD_ERR | 46 | 06-04-46 |
| HTTPDREQUEST_ERR | 47 | 06-04-47 |
| HTTPOTHER | 51 | 06-04-51 |
| LINK ERR | 52 | 99-04-52 |

4.5. Disk Recorder Category common MIB (Event log)

Event log is shown as follows.

Event log is Disk Recorder Category (HdrCategory) common MIB as PssSSD common MIB.

HdrCategory =1.3.6.1.4.1.258.5100.200

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|---------------|--------------------------------|--------|-------------------|--|-----------------|
| 15 | EvtLogNumber | Integer | RO | HdrCategory.1.3 | Event log (1-750) | 0 |
| 16 | EvtLogIndex | Integer (1...750) | RO | HdrCategory.1.4.1 | Index of Event log | 1-750 |
| 17 | EvtLogDayTime | DisplayString (SIZE0...255) | RO | HdrCategory.1.4.2 | The date and time of event log "e.g. 02-10-29 12:00:00" | 0 |
| 18 | EvtLogType | Integer | RO | HdrCategory.1.4.3 | "Event log type" - "Ch No./Alarm In port No." | 0 |

4.5.1. Event logtype

| Event log type | Type No. | Event type | Channel No. Alarm out No, |
|---------------------|----------|------------|------------------------------|
| | Value | | |
| TRM | 2 | 02 | Alarm In port number(1-32) |
| COM | 3 | 03 | Channel No, |
| EMR | 4 | 04 | 0 fixed |
| SCD | 5 | 05 | Channel No, |
| CAM | 8 | 08 | Channel No, |
| Face matching alarm | 20 | 20 | Channel No, |

4.5.2. Port number in the back of Recorder

| | Type | Alarm port number |
|---|---------------|-------------------|
| Port number in the back of Recorder | No assignment | 0 |
| | Port number1 | 1 |
| | Port number2 | 2 |
| | Port number3 | 3 |
| | Port number4 | 4 |
| | Port number5 | 5 |
| | Port number6 | 6 |
| | Port number7 | 7 |
| | Port number8 | 8 |
| | Port number9 | 9 |
| | Port number10 | 10 |
| | Port number11 | 11 |
| | Port number12 | 12 |
| | Port number13 | 13 |
| | Port number14 | 14 |
| | Port number15 | 15 |
| | Port number16 | 16 |
| | Port number17 | 17 |
| | Port number18 | 18 |
| | Port number19 | 19 |
| | Port number20 | 20 |
| | Port number21 | 21 |
| | Port number22 | 22 |
| | Port number23 | 23 |
| | Port number24 | 24 |
| | Port number25 | 25 |
| | Port number26 | 26 |
| | Port number27 | 27 |
| | Port number28 | 28 |
| | Port number29 | 29 |
| | Port number30 | 30 |
| | Port number31 | 31 |
| | Port number32 | 32 |

4.6. Disk Recorder Category common MIB (Error log)

Error log is Disk Recorder Category (HdrCategory) common MIB as PssSSD common MIB.

HdrCategory=1.3.6.1.4.1.258.5100.200

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|---------------|--------------------------------|--------|---|---|-----------------|
| 19 | ErrLogNumber | Integer | RO | HdrCategory.1.5 | The number of error log (1-100) | 0 |
| 20 | ErrLogIndex | Integer (1...100) | RO | HdrCategory.1.6.1.1 - HdrCategory.1.6.100.1 | Index of Error log | 1-100 |
| 21 | ErrLogDayTime | DisplayString (SIZE0...255) | RO | HdrCategory.1.6.1.2 - HdrCategory.1.6.100.2 | The date and time of Error log "e.g. 02-10-29 12:00:00" | 0 |
| 22 | ErrLogType | DisplayString (SIZE0...255) | RO | HdrCategory.1.6.1.3 - HdrCategory.1.6.100.3 | Error log type "Error type"- "Unit number"- "Disk number/Channel No./Port No./Area/Fan number" *)reference as fellows | 0 |

4.6.1. Error logtype

| Category | Error type description | Error type | Unit number | Disk number/Channel No./Port No./Area /Fan number |
|----------|------------------------------------|------------|-------------|---|
| HDD | HDD Write error | 001 | Unit number | 0 fixed |
| | HDD Read error | 002 | Unit number | 0 fixed |
| | Copy media Write error | 003 | Unit number | 0 fixed Unit number SD=201/DVD=202/USB=203 |
| | HDD SMART warning | 004 | Unit number | Disk number (Both single mode and RAID mode) |
| | HDD hour meter warning | 005 | Unit number | Disk number |
| | Remain capacity warning | 006 | Area number | Remain capacity |
| | Event recording area capacity full | 008 | Area number | Remain capacity (0) |
| | Copy area capacity full | 009 | Area number | Remain capacity (0) |
| | Copy 1 drive capacity full | 010 | Unit number | 0 fixed Unit number SD=201/DVD=202/USB=203 |
| | Copy 2 drive capacity full | 011 | - | - |
| | Disk Write protect | 012 | - | - |
| | No disk inserted | 013 | - | - |
| | Unsupported disk | 014 | - | - |
| | Unformatted disk | 015 | - | - |
| | Disk mirroring recovery failure | 017 | Unit number | 0 fixed |
| | Remove auto links (per HDD) | 016 | Unit number | Disk number |
| | HDD error | 020 | - | - |
| | No copy data | 021 | - | - |
| | No copy drive | 022 | - | - |
| | Copy media Read error | 023 | Unit number | 0 fixed Unit number SD=201/DVD=202/USB=203 |
| | Logical volume error | 024 | 000 fixed | 0 fixed |
| | Verify error | 025 | - | - |
| | RAID5 recovery failure | 018 | Unit number | 0 fixed |
| | RAID6 recovery failure | 034 | Unit number | 0 fixed |
| | Remove auto links (per unit) | 019 | Unit number | 0 fixed |
| | RAID5 1 DOWN | 026 | Unit number | 0 fixed |
| | RAID5 2 DOWN | 027 | Unit number | 0 fixed |

| Category | Error type description | Error type | Unit number | Disk number/Channel No./Port No./Area /Fan number |
|---------------------------------------|--------------------------------------|-------------|-------------|---|
| HDD | RAID6 1 DOWN | 035 | Unit number | 0 fixed |
| | RAID6 2 DOWN | 036 | Unit number | 0 fixed |
| | RAID6 3 DOWN | 037 | Unit number | 0 fixed |
| | Copy error | 028 | 000 fixed | 0 fixed |
| | Skip HDD (per HDD) | 029 | Unit number | Disk number |
| | Skip HDD (per unit) | 038 | Unit number | 0 fixed |
| | Single mode format failure | 030 | 001 | Disk number |
| | Mirror format failure(*) | 031 | Unit number | 0 fixed |
| | RAID5 mode format failure | 039 | Unit number | 0 fixed |
| | RAID6 mode format failure | 040 | Unit number | 0 fixed |
| | HDD remove error | 033 | 001 | Disk number |
| | HDD replacement warning | 032 | 001 | Disk number |
| | Partition error (per HDD) | 041 | Unit number | Disk number |
| | Partition error (per unit) | 042 | Unit number | 0 fixed |
| | Over limitation on SD memory card | 043 | Unit number | 0 fixed Unit number SD=201/DVD=202/USB=203 |
| | Mirror recovery complete (done) | 044 | Unit number | 0 fixed |
| | RAID5 recovery complete (done) | 045 | Unit number | 0 fixed |
| | RAID6 recovery complete (done) | 046 | Unit number | 0 fixed |
| | Mirror recovery start | 047 | Unit number | 0 fixed |
| | RAID5 recovery start | 048 | Unit number | 0 fixed |
| | RAID6 recovery start | 049 | Unit number | 0 fixed |
| | Parameter format error | 050 | Unit number | 0 fixed |
| HDD response delay warning (per HDD) | 227 | Unit number | Disk number | |
| HDD response delay warning (per unit) | 228 | Unit number | Disk number | |
| Mirror 1 DOWN | 051 | Unit number | 0 fixed | |
| Main unit | Fan error | 101 | Unit number | Fan number |
| | Thermal trouble | 102 | Unit number | 0 fixed |
| | Power failure detection | 103 | 000 fixed | 0 fixed |
| | Power failure recovery | 104 | 000 fixed | 0 fixed |
| | HDD insertion/removal warning(*) | 105 | 000 fixed | Disk number, Times |
| | Reboot by system error | 106 | 000 fixed | 0 fixed |
| | Recording error detection (by Agent) | 107 | 000 fixed | 0 fixed (ND/NV) Channel No. (NX) |

| Category | Error type description | Error type | Unit number | Disk number/Channel No./Port No./Area /Fan number |
|-----------|---|------------|-------------|---|
| Main unit | Reboot (CPU) | 108 | 000 fixed | 0 fixed |
| | Reboot (DEC) | 109 | 000 fixed | 0 fixed |
| | Reboot (NW failure detection) | 110 | 000 fixed | 0 fixed |
| | Communication speed warning | 111 | 000 fixed | 0 fixed (ND/NV) Port number (NX) |
| | Recording error detection (by RCA) | 112 | 000 fixed | 0 fixed |
| | Undetected Sub Monitor | 113 | 000 fixed | 0 fixed |
| | Recording error detection | 114 | 000 fixed | 0 fixed (ND/NV) Channel No. (NX) |
| | Login error | 115 | 000 fixed | 0 fixed |
| | File over (Operation stop) | 236 | 000 fixed | 0 fixed |
| | Failover (Alternative operation) | 237 | 000 fixed | Recorder number monitored for failover |
| Camera | Remove links error | 201 | 000 fixed | Port number |
| | DHCP IP Address loss | 202 | 000 fixed | Port number |
| | NW camera error detection | 203 | 000 fixed | Channel No. |
| | NW camera error recovery | 204 | 000 fixed | Channel No. |
| | Camera SD memory card error | 205 | 000 fixed | Channel No. |
| | Camera SD memory card starting write error | 206 | 000 fixed | Channel No. |
| | Camera SD memory card ending write error | 207 | 000 fixed | Channel No. |
| | Camera SD memory card list request error | 208 | 000 fixed | Channel No. |
| | Camera SD memory card data obtainment failure | 209 | 000 fixed | Channel No. |
| | Camera SD memory card data deletion failure | 210 | 000 fixed | Channel No. |
| | Video loss detection | 211 | 000 fixed | Channel No. |
| | Video loss recovery | 212 | 000 fixed | Channel No. |
| | NW camera error detection (audio) | 213 | 000 fixed | Channel No. |
| | NW camera error recovery (audio) | 214 | 000 fixed | Channel No. |
| | Panasonic alarm DNS error | 215 | 000 fixed | Channel No. |
| | Panasonic alarm response error | 216 | 000 fixed | Channel No. |
| | Panasonic alarm other error | 217 | 000 fixed | Channel No. |
| | | 218 | - | |
| | 239 | | | |

| Category | Error type description | Error type | Unit number | Disk number/Channel No./Port No./Area/Fan number |
|----------|------------------------|------------|-------------|--|
| Data | Alteration detected | 301 | 000 fixed | |
| | | 302 | | |

4.6.2. Error log unitnumber

| Type | Unit number |
|--------------------|-------------|
| No Unit assignment | 000 |
| Main unit | 001 |
| Extension unit1 | 101 |
| Extension unit2 | 102 |
| Extension unit3 | 103 |
| Extension unit4 | 104 |
| Extension unit5 | 105 |
| Copy drive1 (SD) | 201 |
| Copy drive2 (DVD) | 202 |
| Copy drive3 (USB) | 203 |

4.6.3. Error log Disk number/Channel number/Port number/Area number/Fan number

| | Type | Disk No. |
|-------------------|--------------------|-------------------------|
| Disk No. | No Disk assignment | 0 (Used on RAID5/RAID6) |
| | Main unit1 | 1 |
| | Main unit2 | 2 |
| | Main unit3 | 3 |
| | Main unit4 | 4 |
| | Main unit5 | 33 |
| | Main unit6 | 34 |
| | Main unit7 | 35 |
| | Main unit8 | 36 |
| | Main unit9 | 37 |
| | Extension unit1-1 | 5 |
| | Extension unit1-2 | 6 |
| | Extension unit1-3 | 7 |
| | Extension unit1-4 | 8 |
| | Extension unit1-5 | 38 |
| | Extension unit1-6 | 39 |
| | Extension unit1-7 | 40 |
| | Extension unit1-8 | 41 |
| | Extension unit1-9 | 42 |
| | Extension unit2-1 | 9 |
| | Extension unit2-2 | 10 |
| | Extension unit2-3 | 11 |
| | Extension unit2-4 | 12 |
| | Extension unit2-5 | 43 |
| | Extension unit2-6 | 44 |
| | Extension unit2-7 | 45 |
| | Extension unit2-8 | 46 |
| | Extension unit2-9 | 47 |
| | Extension unit3-1 | 13 |
| | Extension unit3-2 | 14 |
| | Extension unit3-3 | 15 |
| | Extension unit3-4 | 16 |
| Extension unit3-5 | 48 | |
| Extension unit3-6 | 49 | |
| Extension unit3-7 | 50 | |

| | Type | Disk No. |
|----------|-------------------|----------|
| Disk No. | Extension unit3-8 | 51 |
| | Extension unit3-9 | 52 |
| | Extension unit4-1 | 17 |
| | Extension unit4-2 | 18 |
| | Extension unit4-3 | 19 |
| | Extension unit4-4 | 20 |
| | Extension unit4-5 | 53 |
| | Extension unit4-6 | 54 |
| | Extension unit4-7 | 55 |
| | Extension unit4-8 | 56 |
| | Extension unit4-9 | 57 |
| | Extension unit5-1 | 21 |
| | Extension unit5-2 | 22 |
| | Extension unit5-3 | 23 |
| | Extension unit5-4 | 24 |
| | Extension unit5-5 | 58 |
| | Extension unit5-6 | 59 |
| | Extension unit5-7 | 60 |
| | Extension unit5-8 | 61 |
| | Extension unit5-9 | 62 |

| | Type | Value | Remarks |
|-------------|--------------------------|-------|---------|
| Channel No. | No Camera No, assignment | 0 | |
| | Camera1 | 1 | |
| | Camera2 | 2 | |
| | Camera3 | 3 | |
| | Camera4 | 4 | |
| | Camera5 | 5 | |
| | Camera6 | 6 | |
| | Camera7 | 7 | |
| | Camera8 | 8 | |
| | Camera9 | 9 | |
| | Camera10 | 10 | |
| | Camera11 | 11 | |
| | Camera12 | 12 | |
| | Camera13 | 13 | |
| | Camera14 | 14 | |
| | Camera15 | 15 | |
| | Camera16 | 16 | |
| | Camera17 | 17 | |
| | Camera18 | 18 | |
| | Camera19 | 19 | |
| | Camera20 | 20 | |
| | Camera21 | 21 | |
| | Camera22 | 22 | |
| | Camera23 | 23 | |
| | Camera24 | 24 | |
| | Camera25 | 25 | |
| | Camera26 | 26 | |
| | Camera27 | 27 | |
| | Camera28 | 28 | |
| | Camera29 | 29 | |
| | Camera30 | 30 | |
| | Camera31 | 31 | |
| | Camera32 | 32 | |
| | Camera33 | 33 | |
| | Camera34 | 34 | |
| | Camera35 | 35 | |

| | Type | Value | Remarks |
|-------------|----------|-------|---------|
| Channel No. | Camera36 | 36 | |
| | Camera37 | 37 | |
| | Camera38 | 38 | |
| | Camera39 | 39 | |
| | Camera40 | 40 | |
| | Camera41 | 41 | |
| | Camera42 | 42 | |
| | Camera43 | 43 | |
| | Camera44 | 44 | |
| | Camera45 | 45 | |
| | Camera46 | 46 | |
| | Camera47 | 47 | |
| | Camera48 | 48 | |
| | Camera49 | 49 | |
| | Camera50 | 50 | |
| | Camera51 | 51 | |
| | Camera52 | 52 | |
| | Camera53 | 53 | |
| | Camera54 | 54 | |
| | Camera55 | 55 | |
| | Camera56 | 56 | |
| | Camera57 | 57 | |
| | Camera58 | 58 | |
| | Camera59 | 59 | |
| | Camera60 | 60 | |
| | Camera61 | 61 | |
| | Camera62 | 62 | |
| | Camera63 | 63 | |
| | Camera64 | 64 | |
| | Camera65 | 65 | |
| | Camera66 | 66 | |
| | Camera67 | 67 | |
| | Camera68 | 68 | |
| | Camera69 | 69 | |
| | Camera70 | 70 | |
| | Camera71 | 71 | |
| | Camera72 | 72 | |

| | Type | Value | Remarks |
|-------------|-----------|-------|---------|
| Channel No. | Camera73 | 73 | |
| | Camera74 | 74 | |
| | Camera75 | 75 | |
| | Camera76 | 76 | |
| | Camera77 | 77 | |
| | Camera78 | 78 | |
| | Camera79 | 79 | |
| | Camera80 | 80 | |
| | Camera81 | 81 | |
| | Camera82 | 82 | |
| | Camera83 | 83 | |
| | Camera84 | 84 | |
| | Camera85 | 85 | |
| | Camera86 | 86 | |
| | Camera87 | 87 | |
| | Camera88 | 88 | |
| | Camera89 | 89 | |
| | Camera90 | 90 | |
| | Camera91 | 91 | |
| | Camera92 | 92 | |
| | Camera93 | 93 | |
| | Camera94 | 94 | |
| | Camera95 | 95 | |
| | Camera96 | 96 | |
| | Camera97 | 97 | |
| | Camera98 | 98 | |
| | Camera99 | 99 | |
| | Camera100 | 100 | |
| | Camera101 | 101 | |
| | Camera102 | 102 | |
| | Camera103 | 103 | |
| | Camera104 | 104 | |
| | Camera105 | 105 | |
| | Camera106 | 106 | |
| | Camera107 | 107 | |
| | Camera108 | 108 | |
| Camera109 | 109 | | |

| Type | | Value | Remarks |
|-------------|-----------|-------|---------|
| Channel No. | Camera110 | 110 | |
| | Camera111 | 111 | |
| | Camera112 | 112 | |
| | Camera113 | 113 | |
| | Camera114 | 114 | |
| | Camera115 | 115 | |
| | Camera116 | 116 | |
| | Camera117 | 117 | |
| | Camera118 | 118 | |
| | Camera119 | 119 | |
| | Camera120 | 120 | |
| | Camera121 | 121 | |
| | Camera122 | 122 | |
| | Camera123 | 123 | |
| | Camera124 | 124 | |
| | Camera125 | 125 | |
| | Camera126 | 126 | |
| | Camera127 | 127 | |
| | Camera128 | 128 | |

| Type | | Port number |
|-------------|----------------------|-------------|
| Port number | No assignment number | 0 |
| | Camera/PC port | 1 |
| | PC port | 2 |
| | Maintenance port | 3 |

| Type | | Area number |
|-------------|--------------------|-------------|
| Area number | No assignment area | 0 |
| | Normal area | 1 |
| | Event area | 2 |
| | Copy area | 3 |

| Type | | Fan number |
|------------|-------------------|------------|
| Fan number | No assignment fan | 0 |
| | Fan1 | 1 |
| | Fan2 | 2 |
| | Fan3 | 3 |
| | Fan4 | 4 |
| | Fan5 | 5 |

| Type | | NAS storage location number |
|-----------------------------|-------------------|-----------------------------|
| NAS storage location number | Storage location1 | 1 |
| | Storage location2 | 2 |

| Type | | Recorder number | Remarks |
|--|-----------|-----------------|---|
| Recorder number monitored for failover | Recorder1 | 1 | Recorder number described on Failover setup |
| | Recorder2 | 2 | |
| | Recorder3 | 3 | |
| | Recorder4 | 4 | |
| | Recorder5 | 5 | |

4.7. Disk Recorder Category common MIB (HDD information)

HDD information is Disk Recorder Category (HdrCategory) common MIB as PssSSD common MIB.

HdrCategory=1.3.6.1.4.1.258.5100.200

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|-------------|---------|--------|--|--|-----------------|
| 1 | HDD | String | RO | HdrCategory.1.13.1.1 - HdrCategory.1.13.1.58 | HDD capacity(GB) or Link status Index is HDD number(1-62) (as same as RAID mode) * Normal Disk: e.g. "500 GB" * ADD Disk : "ADD" * LOST Disk : "LOST" * REMOVE Disk: "REMOVE" * No Disk : "-GB" * Disk change: "*" * USED Disk : "USED" * ERROR Disk : "ERROR" | 500 |
| | | Integer | RO | HdrCategory.1.13.11.1 - HdrCategory.1.13.11.58 | HDD capacity(GB) or Link status Index is HDD number(1-62) (as same as RAID mode) * Normal Disk: e.g. "500" * ADD Disk : "99999991" * LOST Disk : "99999992" * REMOVE Disk: "99999993" * No Disk : "99999999" * Disk change : "11111111" * USED Disk : "22222222" * ERROR Disk : "99999994" | |

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|-------------|---------|--------|--|---|-----------------|
| 2 | HourMeterXX | String | RO | HdrCategory.1.13.2.1 - HdrCategory.1.13.2.58 | The operating time(hour) of the HDD. (1-99999) Index is HDD number(1-62) (as same as RAID mode) * Normal Disk: e.g. "125 h" * Other: "- h" | 0 h |
| | | Integer | RO | HdrCategory.1.13.12.1 - HdrCategory.1.13.12.58 | The operating time (hour) of the HDD. (1-99999) Index is HDD number(1-62) (as same as RAID mode) * Normal Disk: e.g. "125" * Other: "99999999" | 0 h |

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|-------------|---------|--------|--|--|-----------------|
| 3 | HDDGList | String | RO | HdrCategory.1.13.3.1 - HdrCategory.1.13.3.58 | The number of G-List (Hex:0000-FFFF) Index is HDD number(1-62) (as same as RAID mode) * Normal Disk or REMOVE Disk :e.g. "001A" Hex and four digit * Other :"-" | 0 |
| | | Integer | RO | HdrCategory.1.13.13.1 - HdrCategory.1.13.13.58 | The number of G-List (Hex:0000-FFFF) Index is HDD number(1-62) (as same as RAID mode) * Normal Disk or REMOVE Disk :e.g."00000026" Decimal and eight digit * Other :"-" | 0 |

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|-------------|---------|--------|--|--|-----------------|
| 4 | HDDSmart | String | RO | HdrCategory.1.13.4.1 - HdrCategory.1.13.4.58 | HDD smart warning Index is HDD number(1-62) (as same as RAID mode) * Normal Disk or REMOVE Disk : Not warning "0" : Warning "1" * Other :"-" | 0 |
| | | Integer | RO | HdrCategory.1.13.14.1 - HdrCategory.1.13.14.58 | HDD smart warning Index is HDD number(1-62) (as same as RAID mode) * Normal Disk or REMOVE Disk : Not warning "0" : Warning "1" * Other : "99999999" | 0 |

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|---------------|---------|--------|--|--|-----------------|
| 5 | HDDSingleRaid | String | RO | HdrCategory.1.13.5.1 - HdrCategory.1.13.5.58 | HDD operating status Index is HDD number(1-62) (as same as RAID mode) * Normal Disk or REMOVE Disk : Single mode "0" : RAID5/6 mode normal "1" : RAID5/6 mode down HDD "2" * Other :"-" | 0 |
| | | Integer | RO | HdrCategory.1.13.15.1 - HdrCategory.1.13.15.58 | HDD operating status Index is HDD number(1-62) (as same as RAID mode) * Normal Disk or REMOVE Disk : Single mode "0" : RAID5/6 mode normal "1" : RAID5/6 mode down HDD "2" * Other : "99999999" | 0 |

4.8. Disk Recorder Category common MIB (Reboot status)

Reboot status is Disk Recorder Category (HdrCategory) common MIB as PssSSD common MIB

HdrCategory=1.3.6.1.4.1.258.5100.200

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|---------------|---------|--------|------------------|--|-----------------|
| 1 | rebootRequest | Integer | RO | HdrCategory.1.14 | It is shown whether reboot is necessary. 0: Normal state (reboot not need) 1: State of reboot demand | 0 |

4.9. Disk Recorder Category common MIB (Camera connection status)

Camera connection status is Disk Recorder Category (HdrCategory) common MIB as PssSSD common MIB

HdrCategory=1.3.6.1.4.1.258.5100.200

| No. | Object name | Syntax | Access | OID | Description | Factory default |
|-----|--------------|---------|--------|---|--|-----------------|
| 1 | CamSvncState | Integer | RO | HdrCategory.1.15.1 -- HdrCategory.1.15.64 | 0: connect 1: Not connect - NX400 : Index 1-128 is Camera channel. - NX200/NX300 : Index 1-32 is Camera channel. - NX100 : Index 1-16 is Camera channel. | - |

4.10. Disk Recorder Category common MIB (Temperature)

Temperature is Disk Recorder Category (HdrCategory) common MIB as PssSSD common MIB.

HdrCategory=1.3.6.1.4.1.258.5100.200

| No. | Object name | Syntax | Access | OID | Description |
|-----|-------------|---------|--------|----------------------|--|
| 1 | Temperature | String | RO | HdrCategory.1.16 | Temperature of Recorder (The second place of the decimal point is rounded off) * J/G model :degrees centigrade * P model :degrees Fahrenheit e.g. 38.4 deg C 101.1 deg F Not displayable -- degrees centigrade -- degrees Fahrenheit |
| | | Integer | RO | HdrCategory.1.16.2.1 | * J/G model Temperature of Recorder (The first place of the decimal point is rounded off) e.g.:38.4 deg C -> 38 |
| | | Integer | RO | HdrCategory.1.16.2.2 | * J/G model Temperature of Recorder (The second of the decimal point is rounded off, and do 10 times) e.g.:38.39 deg C -> 384 |
| | | Integer | RO | HdrCategory.1.16.3.1 | * P model Temperature of Recorder (The first place of the decimal point is rounded off) e.g.:101.1 deg F -> 101 |
| | | Integer | RO | HdrCategory.1.16.3.2 | * P model Temperature of Recorder (The second of the decimal point is rounded off, and do 10 times) e.g.:101.09 deg F -> 1011 |

5. **Community**

In setup menu of Recorder, the user can set the community name.

The default value is "NULL".

6. **Recorder SNMP settings**

The capital letter and the small letter are distinguished.

| Recorder SNMP settings | Object name | Description | Factory default | Max length |
|---------------------------|--------------|--|--------------------|------------|
| Community | | Community name | NULL | 32 |
| System name | SysName | Name for this managed node. This is the node's fully-qualified domain name. | NULL | 255 |
| Location | Sys Location | The physical location of this node. | NULL | 255 |
| Contact | SysContact | The contact person for this managed node, information on how to contact this person. | NULL | 255 |

7. **MIB under Enterprises**

It is fix value.

| OID | Name | Description |
|------|-------------|--|
| 258 | Panasonic | Panasonic |
| 5100 | PssSSD | System Solutions Company Security & Sound Systems Business Unit |
| 200 | HdrCategory | Disk Recorder Category |