

How to check DDM information via SNMP

1) show ddm

- CLI :

```
DGS-3627:admin#sh ddm
Command: show ddm

DDM Log      :Enabled
DDM Trap     :Disabled
Success.
```

- SNMP MIB Description:

- DDM Log:

⇒ **OID:** 1.3.6.1.4.1.171.12.72.1.2

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.1.2

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.1.2
SNMPv2-SMI::enterprises.171.12.72.1.2.0 = INTEGER: 1
```

```
Object name      swDdmLogState
Object ID        1.3.6.1.4.1.171.12.72.1.2
Module           DDM-MGMT-MIB

Base syntax      Integer
Composed syntax  INTEGER
Access           Read-Write
Status           Current
Value list       1 : enabled(1)
                 2 : disabled(2)

Parent node      swDdmCtrl
First child      None
Description      This object indicates the log action state.
```

- DDM Trap:

⇒ **OID:** 1.3.6.1.4.1.171.12.72.1.1

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.1.1

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.1.1
SNMPv2-SMI::enterprises.171.12.72.1.1.0 = INTEGER: 2
```

```
Object name      swDdmTrapState
Object ID        1.3.6.1.4.1.171.12.72.1.1
Module           DDM-MGMT-MIB

Base syntax      Integer
Composed syntax  INTEGER
Access           Read-Write
Status           Current
Value list       1 : enabled(1)
                 2 : disabled(2)

Parent node      swDdmCtrl
First child      None
Description      This object indicates the trap action state.
```

2) show ddm ports status:

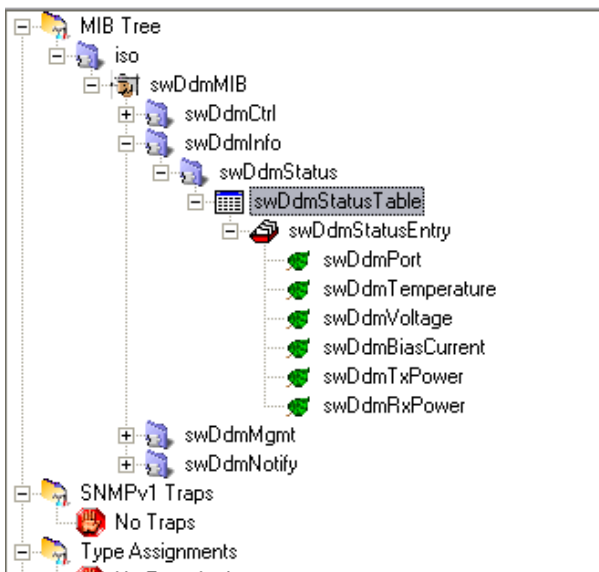
- CLI::

```
DGS-3627:admin#show ddm ports s
Command: show ddm ports status
```

Port	Temperature (in Celsius)	Voltage (V)	Bias Current (mA)	TX Power (mW)	RX Power (mW)
1	-	-	-	-	-
2	-	-	-	-	-
3	-	-	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
6	-	-	-	-	-
.....					
....					

- SNMP MIB Description:

DDM Status Table:



The MIB Tree diagram shows the following structure:

- iso
 - swDdmMIB
 - swDdmCtrl
 - swDdmInfo
 - swDdmStatus
 - swDdmStatusTable (Selected)
 - swDdmStatusEntry
 - swDdmPort
 - swDdmTemperature
 - swDdmVoltage
 - swDdmBiasCurrent
 - swDdmTxPower
 - swDdmRxPower
 - swDdmMgmt
 - swDdmNotify

- SNMPv1 Traps
- No Traps
- Type Assignments

Object name	swDdmStatusTable
Object ID	1.3.6.1.4.1.171.12.72.2.1.1
Module	DDM-MGMT-MIB
Base syntax	Sequence Of swDdmStatusEntry
Access	Not_Accessible
Status	Current
Sequence	1:swDdmPort - Integer 2:swDdmTemperature - Octet String 3:swDdmVoltage - Octet String 4:swDdmBiasCurrent - Octet String 5:swDdmTxPower - Octet String 6:swDdmRxPower - Octet String
Parent node	swDdmStatus
First child	swDdmStatusEntry
Description	This table contains the DDM status information.

- **DDM port:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.2.1.1.1

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.1 = INTEGER: 1
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.2 = INTEGER: 2
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.3 = INTEGER: 3
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.4 = INTEGER: 4
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.5 = INTEGER: 5
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.6 = INTEGER: 6
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.7 = INTEGER: 7
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.8 = INTEGER: 8
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.9 = INTEGER: 9
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.10 = INTEGER: 10
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.11 = INTEGER: 11
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.12 = INTEGER: 12
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.13 = INTEGER: 13
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.14 = INTEGER: 14
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.15 = INTEGER: 15
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.16 = INTEGER: 16
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.17 = INTEGER: 17
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.18 = INTEGER: 18
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.19 = INTEGER: 19
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.20 = INTEGER: 20
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.21 = INTEGER: 21
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.22 = INTEGER: 22
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.23 = INTEGER: 23
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.24 = INTEGER: 24
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.25 = INTEGER: 25
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.26 = INTEGER: 26
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.27 = INTEGER: 27
```

Object name	swDdmPort
Object ID	1.3.6.1.4.1.171.12.72.2.1.1.1
Module	DDM-MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : 1..65535
Parent node	swDdmStatusEntry
First child	None
Description	This object indicates the port.

- **DDM Temperature:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.2.1.1.1.2

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1.2.25
(.25 = port 25)

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1.2.25
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.2.25 = STRING: " -"
```

Object name	swDdmTemperature
Object ID	1.3.6.1.4.1.171.12.72.2.1.1.1.2
Module	DDM-MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Only
Status	Current
Value list	1 : 0..255
Parent node	swDdmStatusEntry
First child	None
Description	This object indicates the real time value of the temperature. As the value is a floating point data type, the DisplayString type is used to define this parameter.

- **DDM Voltage:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.2.1.1.1.3

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1.3.25
(.25 = port 25)

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1.3.25
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.3.25 = STRING: " -"
```

Object name	swDdmVoltage
Object ID	1.3.6.1.4.1.171.12.72.2.1.1.1.3
Module	DDM-MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Only
Status	Current
Value list	1 : 0..255
Parent node	swDdmStatusEntry
First child	None
Description	This object indicates the real time value of the supply voltage. As the value value is a floating point data type, the DisplayString type is used to define this parameter.

- **DDM Bias Current:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.2.1.1.1.4

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1.4.25
(.25 = port 25)

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1.4.25
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.4.25 = STRING: " -"
```

Object name	swDdmBiasCurrent
Object ID	1.3.6.1.4.1.171.12.72.2.1.1.1.4
Module	DDM-MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Only
Status	Current
Value list	1 : 0..255
Parent node	swDdmStatusEntry
First child	None
Description	This object indicates the real time value of the tx bias.

- **DDM TX Power:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.2.1.1.1.5

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1.5.25
(.25 = port 25)

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1.5.25
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.5.25 = STRING: " -"
```

Object name	swDdmTxPower
Object ID	1.3.6.1.4.1.171.12.72.2.1.1.1.5
Module	DDM-MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Only
Status	Current
Value list	1 : 0..255
Parent node	swDdmStatusEntry
First child	None
Description	This object indicates the real time value of the tx power. As the value is a floating point data type, the DisplayString type is used to define this parameter.

- **DDM RX Power:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.2.1.1.1.5

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1.5.25
(.25 = port 25)

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.2.1.1.1.6.25
SNMPv2-SMI::enterprises.171.12.72.2.1.1.1.6.25 = STRING: " -"
```

Object name	swDdmRxPower
Object ID	1.3.6.1.4.1.171.12.72.2.1.1.1.6
Module	DDM-MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Only
Status	Current
Value list	1 : 0..255
Parent node	swDdmStatusEntry
First child	None
Description	This object indicates the real time value of the rx power. As the value is a floating data type, the DisplayString type is used to define this parameter.

3) show ddm ports configuration

- CLI:

```

DGS-3627:admin#show ddm ports 23 configuration
Command: show ddm ports 23 configuration

Port:          23
-----

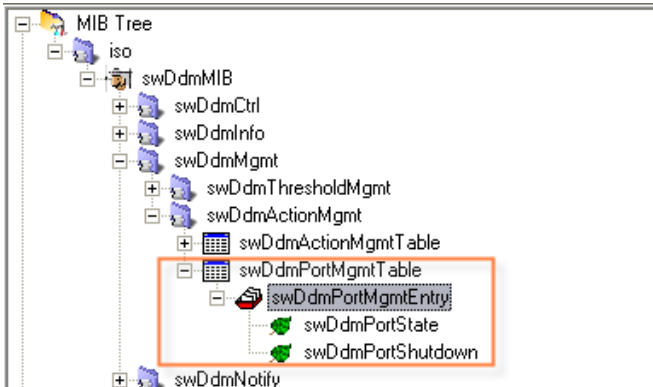
DDM state : Enabled
Shutdown  : Alarm

Threshold      Temperature    Voltage    Bias-Current    TX-Power    RX-Power
-----
High Alarm     -                -          -                -            -
Low Alarm      -                -          -                -            -
High Warning   -                -          -                -            -
Low Warning    -                -          -                -            -

A means that the threshold is administratively configured.
    
```

- SNMP MIB Description:

Port Mgmt Table:



Object name	swDdmPortMgmtEntry
Object ID	1.3.6.1.4.1.171.12.72.3.2.2.1
Module	DDM-MGMT-MIB
Base syntax	Sequence
Access	Not_Accessible
Status	Current
Index	1.swDdmPort
Parent node	swDdmPortMgmtTable
First child	swDdmPortState
Description	This is an entry of the swDdmPortMgmtTable.

- **DDM Port state:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.3.2.2.1.1

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.2.2.1.1.23
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.2.2.1.1.23 i 2
(.23 = port 23)

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.2.2.1.1.23
SNMPv2-SMI::enterprises.171.12.72.3.2.2.1.1.23 = INTEGER: 1
```

```
C:\>snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.2.2.1.1.23 i 2
SNMPv2-SMI::enterprises.171.12.72.3.2.2.1.1.23 = INTEGER: 2
```

Object name	swDdmPortState
Object ID	1.3.6.1.4.1.171.12.72.3.2.2.1.1
Module	DDM-MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : enabled(1) 2 : disabled(2)
Parent node	swDdmPortMgmtEntry
First child	None
Description	This object indicates the DDM state information by port.

- **DDM Port shutdown:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.3.2.2.1.2

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.2.2.1.2.23
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.2.2.1.2.23 i 3
(.23 = port 23)

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.2.2.1.2.23
SNMPv2-SMI::enterprises.171.12.72.3.2.2.1.2.23 = INTEGER: 1
```

```
C:\>snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.2.2.1.2.23 i 3
SNMPv2-SMI::enterprises.171.12.72.3.2.2.1.2.23 = INTEGER: 3
```

Object name	swDdmPortShutdown
Object ID	1.3.6.1.4.1.171.12.72.3.2.2.1.2
Module	DDM-MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Write
Status	Current
Value list	1 : alarm(1) 2 : warning(2) 3 : none(3) 4 : other(4)
Parent node	swDdmPortMgmtEntry
First child	None
Description	This object indicates whether or not to shutdown the port on which the operating parameter exceeds the specified threshold.

Threshold Mgmt Table

	Object name	swDdmThresholdMgmtTable
	Object ID	1.3.6.1.4.1.171.12.72.3.1.1
	Module	DDM-MGMT-MIB
	Base syntax	Sequence Of swDdmThresholdMgmtEntry
	Access	Not_Accessible
	Status	Current
	Sequence	1:swDdmThresholdType - Integer 2:swDdmHighAlarm - Octet String 3:swDdmLowAlarm - Octet String 4:swDdmHighWarning - Octet String 5:swDdmLowWarning - Octet String
	Parent node	swDdmThresholdMgmt
	First child	swDdmThresholdMgmtEntry
	Description	This table contains DDM temperature configuration information.

- Threshold:

⇒ **OID:** 1.3.6.1.4.1.171.12.72.3.1.1.1

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.23
(.23 = port 23)

```
C:\> snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.23
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.23.1 = INTEGER: 1
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.23.2 = INTEGER: 2
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.23.3 = INTEGER: 3
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.23.4 = INTEGER: 4
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.23.5 = INTEGER: 5
```

Object name	swDdmThresholdType
Object ID	1.3.6.1.4.1.171.12.72.3.1.1.1
Module	DDM-MGMT-MIB
Base syntax	Integer
Composed syntax	INTEGER
Access	Read-Only
Status	Current
Value list	1 : temperature(1) 2 : voltage(2) 3 : bias(3) 4 : txPower(4) 5 : rxPower(5)
Parent node	swDdmThresholdMgmtEntry
First child	None
Description	This object indicates the threshold type.

- **High Alarm:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.3.1.1.1.2

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.2.23
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.2.23 x 3
(.23 = port 23)

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.2.23
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.2.23.1 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.2.23.2 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.2.23.3 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.2.23.4 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.2.23.5 = STRING: " -"
```

Object name	swDdmHighAlarm
Object ID	1.3.6.1.4.1.171.12.72.3.1.1.1.2
Module	DDM-MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Write
Status	Current
Value list	1 : 0..255
Parent node	swDdmThresholdMgmtEntry
First child	None
Description	This object indicates the high alarm threshold value to be configured. As the value is a floating point data type, the DisplayString type is used to define this parameter.

- **Low Alarm:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.3.1.1.1.3

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.3.23
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.3.23 x 3
(.23 = port 23)

```
C:\> snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.3.23
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.3.23.1 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.3.23.2 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.3.23.3 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.3.23.4 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.3.23.5 = STRING: " -"
```

Object name	swDdmLowAlarm
Object ID	1.3.6.1.4.1.171.12.72.3.1.1.1.3
Module	DDM-MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Write
Status	Current
Value list	1 : 0..255
Parent node	swDdmThresholdMgmtEntry
First child	None
Description	This object indicates the low alarm threshold value to be configured. As the value is a floating data type, the DisplayString type is used to define this parameter.

- **High Warning:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.3.1.1.1.4

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.4.23
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.4.23 x 3
(.23 = port 23)

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.4.23
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.4.23.1 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.4.23.2 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.4.23.3 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.4.23.4 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.4.23.5 = STRING: " -"
```

Object name	swDdmHighWarning
Object ID	1.3.6.1.4.1.171.12.72.3.1.1.1.4
Module	DDM-MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Write
Status	Current
Value list	1 : 0..255
Parent node	swDdmThresholdMgmtEntry
First child	None
Description	This object indicates the high warning threshold value to be configured. As the value is a floating data type, the DisplayString type is used to define this parameter.

- **Low Warning:**

⇒ **OID:** 1.3.6.1.4.1.171.12.72.3.1.1.1.5

⇒ **CMD:** snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.5.23
snmpset -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.5.23 x 3
(.23 = port 23)

```
C:\>snmpwalk -v2c -c private 10.90.90.90 1.3.6.1.4.1.171.12.72.3.1.1.1.5.23
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.5.23.1 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.5.23.2 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.5.23.3 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.5.23.4 = STRING: " -"
SNMPv2-SMI::enterprises.171.12.72.3.1.1.1.5.23.5 = STRING: " -"
```

Object name	swDdmLowWarning
Object ID	1.3.6.1.4.1.171.12.72.3.1.1.1.5
Module	DDM-MGMT-MIB
Base syntax	Octet String
Composed syntax	DisplayString
Access	Read-Write
Status	Current
Value list	1 : 0..255
Parent node	swDdmThresholdMgmtEntry
First child	None
Description	This object indicates the low warning threshold value to be configured. As the value is a floating data type, the DisplayString type is used to define this parameter.