

# **SCTE** | **STANDARDS**

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**Network Operations Subcommittee**

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**AMERICAN NATIONAL STANDARD**

**ANSI/SCTE 84-3 2017 (R2022)**

**HMS Inside Plant  
Management Information Base (MIB)  
SCTE-HMS-HE-FAN-MIB**

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## DOCUMENT TYPES AND TAGS

Document Type: Specification

Document Tags:

- |   |                                    |  |
|---|------------------------------------|--|
| <input type="checkbox"/> Test or Measurement          | <input type="checkbox"/> Checklist | <input type="checkbox"/> Facility                  |
| <input type="checkbox"/> Architecture or Framework    | <input type="checkbox"/> Metric    | <input checked="" type="checkbox"/> Access Network |
| <input type="checkbox"/> Procedure, Process or Method | <input type="checkbox"/> Cloud     | <input type="checkbox"/> Customer Premises         |

## DOCUMENT RELEASE HISTORY

Release	Date
SCTE 84-3 2004	05/21/2004
SCTE 84-3 2009	07/10/2009
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Note: Standards that are released multiple times in the same year use: a, b, c, etc. to indicate normative balloted updates and/or r1, r2, r3, etc. to indicate editorial changes to a released document after the year.

Note: This document is a reaffirmation of SCTE 84-3 2017. No substantive changes have been made to this document. Information components may have been updated such as the title page, NOTICE text, headers, and footers.

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## SCOPE

This document is identical to SCTE 84-3 2009 except for informative components which may have been updated such as the title page, NOTICE text, headers and footers. No normative changes have been made to this document.

This document provides the branch object identifiers for each of the Fan MIBs within the SCTE HMS Tree.

## COPYRIGHT

The MIB definition found in this document may be incorporated directly in products without further permission from the copyright owner, SCTE.

## NORMATIVE REFERENCE

IETF RFC 1907 SNMPv2-MIB  
IETF RFC 2578 SNMPv2-SMI  
IETF RFC 2579 SNMPv2-TC  
IETF RFC 2580 SNMPv2-CONF  
IETF RFC 2737 ENTITY-MIB  
SCTE 36 SCTE-ROOT  
SCTE 37 SCTE-HMS-ROOTS  
SCTE 38-11 SCTE-HMS-HEADENDIDENT-MIB  
SCTE 38-1 SCTE-HMS-HE-PROPERTY-MIB  
SCTE 84-1 SCTE-HMS-HE-COMMON-MIB

## INFORMATIVE REFERENCE

None

## TERMS AND DEFINITIONS

This document defines the following terms:

**Management Information Base (MIB)** – the specification of information in a manner that allows standard access through a network management protocol.

## REQUIREMENTS

This section defines the mandatory syntax of the SCTE-HMS-HE-FAN-MIB. It follows the IETF Simple Network Management Protocol (SNMP) for defining managed objects.

The syntax is given below.

SCTE-HMS-HE-FAN-MIB DEFINITIONS ::= BEGIN

IMPORTS

OBJECT-TYPE, MODULE-IDENTITY, Unsigned32  
FROM SNMPv2-SMI  
OBJECT-GROUP, MODULE-COMPLIANCE  
FROM SNMPv2-CONF  
entPhysicalIndex  
FROM ENTITY-MIB  
heFans, HeMilliAmp, HeFaultStatus  
FROM SCTE-HMS-HEADENDIDENT-MIB;

heFanModuleMIB MODULE-IDENTITY

LAST-UPDATED "200403250410Z"

ORGANIZATION

"SCTE HMS Working Group"

CONTACT-INFO

"SCTE HMS Subcommittee, Chairman  
mail to: standards@scte.org"

DESCRIPTION

"The MIB module is for representing Fans and Fan Groupings present  
in the headend (or indoor) plant which are supported by a SNMP

agent."

::= { heFans 1 }

heFanMIBObjects OBJECT IDENTIFIER ::= { heFanModuleMIB 1 }

-- Conformance information

heFanMIBConformance OBJECT IDENTIFIER ::= { heFanModuleMIB 2 }

heFanMIBCompliances OBJECT IDENTIFIER ::= { heFanMIBConformance 1 }

heFanMIBGroups OBJECT IDENTIFIER ::= { heFanMIBConformance 2 }

-- The Fan Unit Table

heFanUnitTable OBJECT-TYPE

SYNTAX SEQUENCE OF HeFanUnitEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"A table containing information about headend (or indoor)  
fan groupings. Fans can be in a Fan Tray, Power Supplies,  
attached to the Cabinet, or any fan entity managed by this  
SNMP agent. Each fan grouping will have an associated entry  
in the Entity mib."

::= { heFanMIBObjects 1 }

heFanUnitEntry OBJECT-TYPE

SYNTAX HeFanUnitEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"Information about each Fan Grouping in the subsystem."

INDEX { entPhysicalIndex }

::= { heFanUnitTable 1 }

HeFanUnitEntry ::= SEQUENCE {

heFanUnitAlarm

HeFaultStatus

}

heFanUnitAlarm OBJECT-TYPE

SYNTAX HeFaultStatus

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The fan grouping status. If every fan in the grouping is operating in normal condition the value returned is normal(1), otherwise the value returned will be fault(2).

This object must provide for the alarm management capabilities with a corresponding entry in the discretePropertyTable of SCTE-HMS-PROPERTY-MIB (ANSI/SCTE 38-1).

An Alarm Shall be recorded as an entry in the currentAlarmTable of SCTE-HMS-PROPERTY-MIB (ANSI/SCTE 38-1).

A log record shall be added as an entry in the heCommonLogTable.

An heCommonAlarmEvent notification shall be sent."

::= { heFanUnitEntry 1 }

-- The Fan Status Table

heFanStatusTable OBJECT-TYPE

SYNTAX SEQUENCE OF HeFanStatusEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"A list of monitorable parameter entries for each fan or fan grouping."

::= { heFanMIBObjects 2 }

heFanStatusEntry OBJECT-TYPE

SYNTAX HeFanStatusEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"An entry containing management information applicable  
to a particular fan or fan grouping for this particular fan entity

unit."

INDEX { entPhysicalIndex,  
heFanStatusIndex }

::= { heFanStatusTable 1 }

HeFanStatusEntry ::= SEQUENCE {

heFanStatusIndex

Unsigned32,

heFanStatusCurrent

HeMilliAmp,

heFanStatusAlarm

HeFaultStatus

}

heFanStatusIndex OBJECT-TYPE

SYNTAX Unsigned32

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"An arbitrary value which uniquely identifies the fan or fan grouping  
for this particular fan entity unit."

::= { heFanStatusEntry 1 }

heFanStatusCurrent OBJECT-TYPE

SYNTAX HeMilliAmp

UNITS "milliamperes"

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"Current of this fan or fan grouping for this particular fan entity unit."

::= { heFanStatusEntry 2 }

heFanStatusAlarm OBJECT-TYPE

SYNTAX HeFaultStatus

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This object contains the current alarm status for



this fan or fan grouping for this particular fan entity unit.

This object must provide for the alarm management capabilities with a corresponding entry in the discretePropertyTable of SCTE-HMS-PROPERTY-MIB (ANSI/SCTE 38-1).

An alarm shall be recorded as an entry in the currentAlarmTable of SCTE-HMS-PROPERTY-MIB (ANSI/SCTE 38-1).

A log record shall be added as an entry in the heCommonLogTable.

An heCommonAlarmEvent notification shall be sent."

```
::= { heFanStatusEntry 3 }
```

```
-- Compliance statements
```

```
heFanCompliance MODULE-COMPLIANCE
```

```
STATUS current
```

```
DESCRIPTION
```

```
"The minimum compliance statement for indoor fans."
```

```
MODULE
```

```
MANDATORY-GROUPS { heFanUnitMandatoryGroup }
```

```
GROUP heFanStatusGroup
```

```
DESCRIPTION
```

```
"The heFanStatusGroup is unconditionally optional."
```

```
::= { heFanMIBCompliances 1 }
```

```
-- this module
```

```
heFanUnitMandatoryGroup OBJECT-GROUP
```

```
OBJECTS { heFanUnitAlarm }
```

```
STATUS current
```

```
DESCRIPTION
```

```
"The main group defines mandatory objects for all indoor fans."
```

```
::= { heFanMIBGroups 1 }
```

```
heFanStatusGroup OBJECT-GROUP
```

```
OBJECTS { heFanStatusAlarm,
```

```
heFanStatusCurrent }
```

```
STATUS current
```

```
DESCRIPTION
```

```
"A collection of objects that provide information applicable  
to a particular fan's status parameters."
```

```
::= { heFanMIBGroups 2 }
```

```
END
```