# Siemens 6DS1144-8AA

## 01 TELEPERM M EAVU Module / system role

### Product function

Siemens 6DS1144-8AA couples two redundant processor-side I/O buses to one extension bus and supervises their address, data and control behavior.

### Selected configuration

The EAVU routes the active master to the nonredundant I/O extension while comparing the redundant bus paths. Its status functions distinguish bus control, supply presence and grouped errors so a bus fault can be separated from a missing supply.

### Functional path

| | | | |
|---|---|---|---|
| Redundant processors | EAVU comparison | Master-path selection | I/O extension |

| | |
|---|---|
| Configuration | Two redundant processor-bus paths |
| Interface | One I/O extension connection |
| Operating feature | Separate 24 V and 5 V supplies |

Two front ribbon-cable connectors connect the processor-side buses. Backplane connections carry the I/O bus, supply and cabinet jumper information; each extension requires its own EAVU in the defined rack arrangement.

# 6DS1144-8AA

## 02 Technical operating envelope

| | |
|---|---|
| Processor-side bus connections | 2 redundant paths |
| I/O-side bus connections | 1 extension bus |
| Nominal L+ supply | 24 V DC |
| L+ supply range | 19–33.5 V DC |
| L+ current | 100 mA, plus PS/PM loads |
| Nominal bus supply | 5 V DC |

| | |
|---|---|
| Bus supply range | 4.5–5.5 V DC |
| 5 V current demand | 300 mA |
| Fuse ratings | 3 × 1.6 A, fast acting |
| Cabinet operating temperature | 0–40 °C |
| Processor-bus connectors | X3 and X4, 50-pin ribbon |
| Extension system limit | Up to 7 I/O extensions in the specified AS 235H arrangement |

EAVU ratings apply to the redundant AS 235H I/O comparator and switchover module. System capacity is not an onboard channel count.

### Operating interpretation

The module's redundant and nonredundant bus sides have different roles.

### Configuration boundary

Preserve X3/X4 assignment, cabinet jumpers and fuse positions during service.

### Why does 6DS1144-8AA require both 24 V and 5 V supplies?

L+ supplies the module's 24 V-related circuits and PS/PM functions, while the bus side uses 5 V. Both supply paths must be checked when diagnosing operation.

# 6DS1144-8AA

## 03 System integration and applications

### Redundant processor coupling

Two processor-side bus paths feed the EAVU in an AS 235H arrangement.

### I/O extension selection

The active master is connected to the designated extension-side I/O bus.

### Bus discrepancy supervision

Address, data and control comparison supports diagnosis of inconsistent redundant behavior.

### Cabinet power diagnostics

Separate supply and fused PS/PM indications help locate faults within the extension arrangement.

### System and supply context

Siemens 6DS1144-8AA operates within the following defined system context. Match the EAVU execution, rack position and redundant-bus assignments.

### Application boundary

EAVU ratings apply to the redundant AS 235H I/O comparator and switchover module. System capacity is not an onboard channel count.

### Does 6DS1144-8AA create two independent field-I/O buses?

No. It connects two redundant processor-side paths to one extension-side bus. The redundancy boundary and field-I/O arrangement must be understood separately.

# 6DS1144-8AA

## 04 Engineering selection decisions

### What is compared by 6DS1144-8AA in an AS 235H system?

It supervises the redundant processor-side address, data and control paths and routes the active master toward the I/O extension.

### Which front connectors identify the two processor paths on 6DS1144-8AA?

X3 and X4 are the 50-pin ribbon connections for the two processor-side bus paths. Preserve their assigned routing when reconnecting them.

### Does a red grouped-error indicator on 6DS1144-8AA prove the board has failed?

No. A grouped error can involve a missing 5 V supply, comparator conditions or module faults. Check the supply and bus context before concluding the EAVU itself is defective.

### Which ambient limit applies to 6DS1144-8AA inside the cabinet?

The cabinet operating range is 0–40 °C. Use the temperature at the installed electronics, not the room temperature outside the enclosure.

# 6DS1144-8AA

## 05 Configuration boundary and references

### Lifecycle and support

The current manufacturing and factory-support phase of 6DS1144-8AA is unconfirmed. Apter Power availability is assessed separately from manufacturer lifecycle status.

### Replacement assessment

Preserve X3/X4 assignment, cabinet jumpers and fuse positions during service.

### Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains selection and system context. The separate installation guide covers preparation, connection, tests and handover; use it together with the applicable manufacturer instructions.

### Technical basis

Siemens TELEPERM M I/O Modules, EAVU C79000-T8076-C343-02.

### Related product navigation

- Siemens 6ES7235-0KD22-0XA0
- Siemens 6ES7212-1AE40-0XB0

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries