

STm5 Signal Control Unit

Safe and lasting: STm5 Signal Control Unit Systematic progress

Smart solutions for every junction STm5

Modern units of the **STm** family provide a keystone element for smart traffic control systems. Its consistent modular design converts the **STm 5** unit into an optimum solution for medium to large traffic junctions in terms of both technology and economy.

Integrated control procedures

- Time-controlled signal program selection
- Traffic-controlled signal program selection
- Fixed-time control
- Fully traffic-controlled system
- Request-driven control system
- Phase-oriented control
- Signal-group-oriented control

The unit supports the following standardised control procedures:

- VSPLUS
- LISA+
- CCOL
- Trends Kern

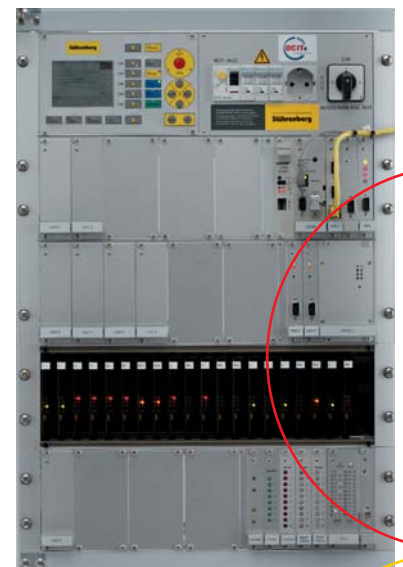
The **STm 5** operates on the basis of the latest microprocessor technology.

It has several processors each working independently of the others.

This design structure and the high-quality hardware used guarantee utmost reliability and fail safety.

The following functions are assigned to every computer:

- Signal program processing including signal indication output by the control computer
- Monitoring of signalling by electronic signal protection terminals
- Interface to a traffic computer



We give you control.

STm5 Signal Control Unit

Technology in detail

The STm 5 meets all pertinent standards and guidelines:

- VDE0832 / HD 638
- EN 50293 (EMC, VDE0832 Part 200)
- EN 61508 (SIL3)
- RiLSA
- ISO9001

Signal protection system

- Configuration using failsafe two-channel microprocessor technology
- Safety integrity level 3 (SIL3)
- Monitoring to avoid any hazardous signalling status
- Monitoring to detect any failures in all lamps
- Checking of time interval and transition time observance

Signal output modules

- Electronic switching elements
- Electrical measuring circuit isolation
- Possible arrangement of measuring circuits by outgoing and return conductors
- One main signal and two repeaters may be connected to every output module
- Several output modules may be interconnected to form a signal group

Master station connection

- Remote diagnostics and supply
- Measuring data acquisition
- Prepared for OCIT control centres, version 2.0

Control unit setup

19" control hardware installed in a hinged bay
All-electronic
Module interconnection using safe bus systems

Voltage supply

230V (-20..+10%) / 50Hz, other voltages available upon request

Signal output modules

120 switching channels for connecting up to 120 three-position signal transmitters, expandable

Lamps

LED 230V, LED 40V OCIT, additional lamps available upon request

Digital outputs

48, expandable

Digital inputs and detector inputs

144
expandable

Modes of operation

Local operation
Time-switch operation (time-controlled signal plan selection)
Master station operation

Synchronization

Timed via GPS and DCF

Display and terminal units

Operator control panel with graphic display unit
Via PC terminal unit

Interfaces

PC interfaces for diagnostics and supply
For local public transport priority systems
For connection to traffic control computers - OCIT version 1.1

- Profile 1 dedicated line
- Profile 2 GSM link
- DVI35
- GDN
- UNICOMP
- BEFA 5, 8, 12
- Other interfaces available upon request

STm5

Traffic control systems

System engineering from a single source

Please call us if you need any additional information. Our engineers will be pleased to give advice.

eMail: info@stuehrenberg.de
Internet: www.stuehrenberg.de

Stührenberg GmbH
Westerfeldstraße 3
D-32758 Detmold
Phone: +49 5231 9150-0
Fax: +49 5231 9150-50

Stührenberg GmbH
Heinrich-Hertz-Straße 8
D-07552 Gera
Phone: +49 365 43 42-0
Fax: +49 365 43 42-43

Stührenberg GmbH
Meeraner Str. 13g
D-12681 Berlin
Phone: +49 30 5300590-0
Fax: +49 30 5300590-53

Stührenberg GmbH
Karlstraße 17
D-86150 Augsburg
Phone: +49 821 455 09-32
Fax: +49 821 455 09-33