



## S600 DIU



### FEATURES

- Door interface electronics housed in one enclosure
- Used with S600 / InfoProx / EtherProx card reader ranges
- 1 double pole relay output and 1 auxiliary relay
- Switched mode power supply unit for 12V or 24V lock output
- Backup battery for emergency power
- Fire alarm and break glass inputs for emergency door release
- Microprocessor controlled for input monitoring and output control
- Provides interface between door furniture and card reader
- Designed for ease of installation and maintenance using 2 part connectors throughout
- Compliant to EN5130 (Access control Immunity), EN55022 (Emissions), EN6950 (Safety)

### OVERVIEW

The S600 Door Interface Unit (DIU) provides operational power to door locks/holders and local power for the card reader.

The S600 DIU components are housed in an industrial enclosure and consist of a high specification switched mode power supply unit, optional backup battery, switch-able relay outputs and Klippon and JST connectors for reader/door interfaces. The S600 DIU enclosure is normally mounted in a location adjacent to the reader and door furniture.

The S600 DIU can supply either a 12V or 24V output voltage to the door lock, depending on user requirements. Two interlinked outputs allow the use of a door strike and door holder, while an auxiliary relay is provided to meet additional user requirements.

When a valid card is read, the reader signals the S600 DIU to switch power to the door strike. When power is removed from the door strike, the door holder is automatically energised; when power is supplied to the door strike, the door holder is automatically de-energised. This facility may be used, for example, when doors need to be held open for operational reasons.

## PRODUCT HIGHLIGHTS

### Interfaces

The S600 DIU provides direct interfaces to the following devices: -

- Card Reader
- Electric Door Strike
- Electric Door Holder
- Fire Alarm System (optional)
- Break Glass Unit (optional)
- Exit Push Button
- Inputs from alarm devices

Up to 5 inputs can be wired from alarm/status monitoring devices direct to the S600 DIU. These devices are used to monitor door sensors, DIU tamper and battery alarms and fire/break glass emergency conditions.

The S600 DIU has three interconnected relays when configured for fail-safe operation. Relay 1 is used for the door strike; the remaining relays are wired in series with Relay 1 and are operated by the fire alarm and break glass unit inputs. If an input from the fire alarm system or break glass unit changes state, the S600 DIU automatically drops power to the door strike; this hardware controlled facility ensures that the door opens in an emergency situation. Details of alarm conditions are sent directly to the master card reader for central alarm notification.

### Board Protection

The mains input to the S600 DIU is filtered to protect against mains carried interference. The door strike and door holder outputs are protected against lock faults. Lock electronics should be installed as per manufacturer's instructions with diode or MOV protection, as required.

CEM Systems Ltd  
Unit 4 Ravenhill Business Park  
Ravenhill Road  
Belfast  
BT6 8AW  
Northern Ireland

Tel: +44 (0)28 9045 6767  
Fax: +44 (0)28 9045 4535  
email: [cem.sales@tycoint.com](mailto:cem.sales@tycoint.com)  
web: [www.cemsys.com](http://www.cemsys.com)

## TECHNICAL SPECIFICATIONS

### Inputs

S600 DIU Inputs		
2 master reader relay inputs		
2 exit reader relay inputs (optional)		
*	I/P_0	Door Position
*	I/P_1	Lock Status
*	I/P_2	Exit Push Button
	I/P_3	Break Glass Unit
	I/P_4	Fire Alarm System
	I/P_5	DIU Mains Fail
	I/P_6	DIU Battery Status
	I/P_7	DIU Tamper

\* = 4 state tamper protected inputs (can also be used as general purpose inputs if primary function is not required).

Note: When DIU inputs are used for door monitoring, reader inputs can be used as general purpose inputs.

### Outputs

S600 DIU	12V/24V to Door Strike/Door Holder
	12V/24V to Auxiliary Output
	12V/24V to External Sounder
(Suppression device: diode, MOV, etc. required at output device)	

### Electrical

Unit Power	
Supply Voltage	240V ac OR 115V ac (factory setting)
Output (Door Strike)	12V @ 3Amp OR 24V @ 2Amp (12V or 24V link selectable)
Power consumption	10W + load of lock
Battery Backup	
12V Operation	One lead acid battery
24V Operation	Two lead acid batteries
Battery protected against deep discharge and overcharge	

### Mechanical

Unit Enclosure  
High impact steel case, sealed to IP54. Protected by tamper sensor.  
A power status indicator panel may be mounted on the exterior of the enclosure.

Enclosure Dimensions (H x W x D)	300 x 250 x 150 mm (11.8 x 9.84 x 5.9in)
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### Environmental

All ratings and values are given for 25°C ambient temperature.  
Tables for battery sizes and ambient temperature de-rating are available in the Technical Manual.

### Product Codes

DIU/600/12V	S600 DIU 12V
DIU/600/24V	S600 DIU 24V