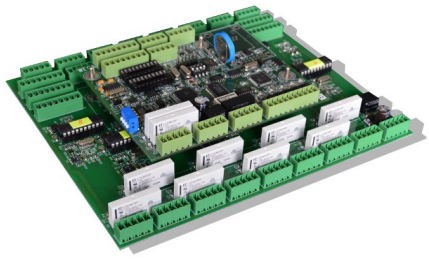
WE_CU control unit

This control unit is used for connection into the WIS access system. Its construction makes it designated for installation into the lower ceiling with an ability to connect two reading units. For the dragON technology it supports connection of reader heads with the RS 485 interface. It is equipped with a controlling microprocessor x51 and it is able to connect up to 8 reader heads WEGA of the KRBox type or up to 8 APERIO HUBs. It also contains new diagnostic LED diodes which check the functions of the functional departments of the reading unit. When it comes to operation, it can work in an online mode, with the ability to switch offline in case communication problems appear.



Versions of the WE_CU control unit

WIST02CU	**WE_CU control unit**	Plastic cover

Functional options

Allowed cards chart capacity	At least 10 000 records, RAM backed up by accumulator
Chart of passages capacity	10 000 records, RAM backed up by accumulator, preset OnLine event sending
Passage without giving a reason, automatic arrival/departure switching	Option of processing way – save/don't save the passage, open/close the door, set passage code, 8 switching times (hour, minute)
Passage time	Day, month, year, hour, minute, second, interruption code
Interruption codes	4 groups (arrival or departure, arrival, departure, system reports, each can contain 16384 different interruption codes
System reports	EZS activation, cover removal, door locking, PIN input error, quiet alarm, passage without opening the door, improper door closing, opening the door by the key....
Automatic door opening	8 time intervals of open doors (interval validity according to the weekday or calendar, hour and minute beginning and interval end)
Time zones	31 time zones defined as a set of 1-32 time intervals, days of validity according to the weekday or work calendar

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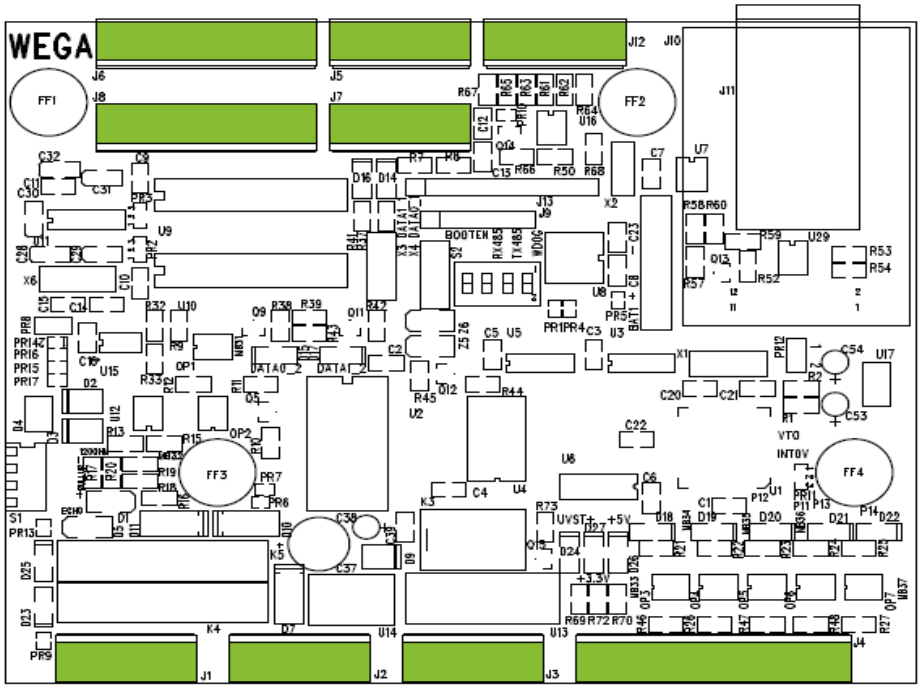
Technical parameters

Dimensions	190mm x 140 mm x 70 mm
Weight	400g
Voltage/Power supply	9-14 V DC
Max. consumption	150 mA
Data memory	SRAM 128 kB backed up by internal battery
Galvanic separation	Only bus RS 485
Communication interface	RS 485
Number of all or nothing relays	For dragON technology needed to add product Input/Output module for the WE_CU dragON system
Max. switched current	6 A DC, LED diagnostic of relay conduct
Inputs	On WEGA reader head – door opening sensor
Number of reading heads	1 to 8
Interface of connected reading heads	WIEGAND, RS 485
Display	no
Range of working temperatures	-25 ¸ +50ºC
IP coverage	IP 56 – plastic cover

Description of connectors



Connector		
	Pin	Meaning
J3	1	GND ISO
	2	RS485 -
	3	RS 485 +
	4	0 V
	5	+ 12 V DC

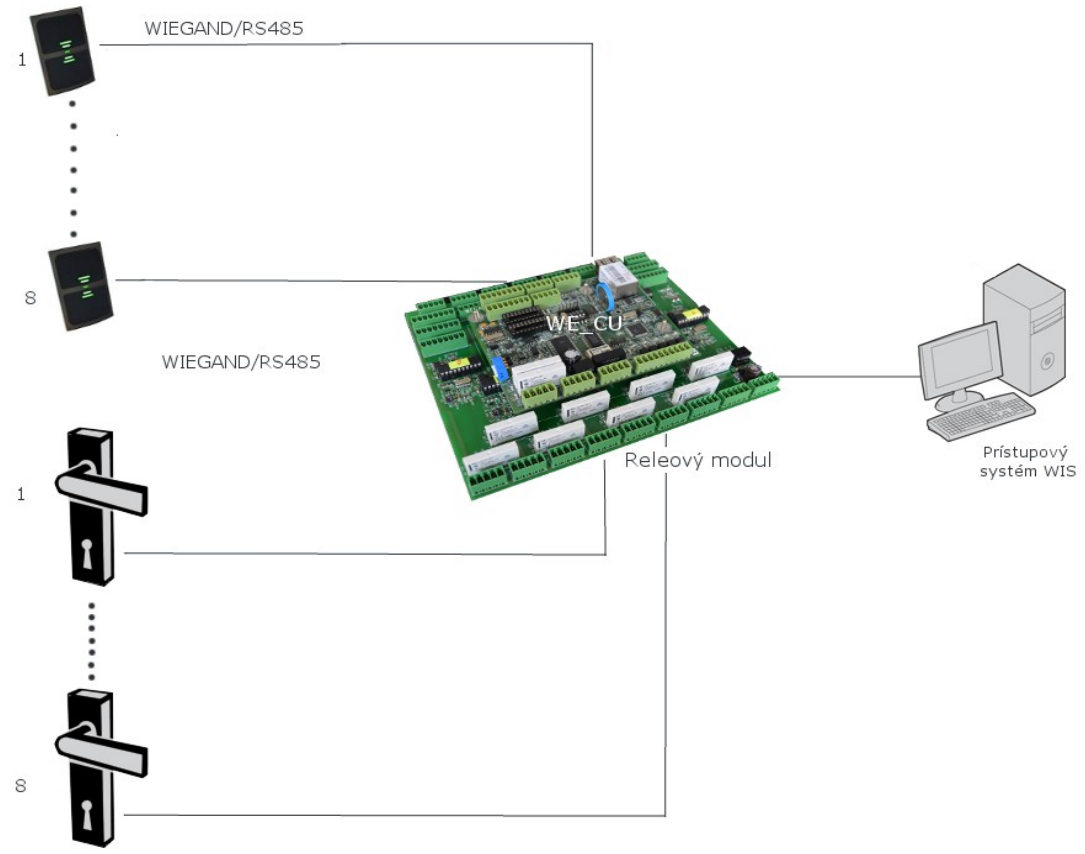
Connector		
	Pin	Meaning
J6	1	Rxd RS 232 1. reader head
	2	Txd RS 232 1. reader head
	3	DATA1 Wiegand 1. reader head
	4	DATA0 Wiegand 1 reader head
	5	Out – Output
	6	Red LED activ.log0
	7	Green LED activ.log. 0
	8	Buzzer activ.log. 0
J5	1	+ 5 V DC - feed 1. head
	2	+12 V DC - feed 1. head
	3	0 V
	4	SDA - I2C data 1. head
	5	SCLK - I2C clock 1. head
J8	1	Rxd RS 232 2. reader head
	2	Txd RS 232 2. reader head
	3	DATA1 Wiegand 2. reader head
	4	DATA0 Wiegand 2 reader head
	5	Out – Output
	6	Red LED activ.log0
	7	Green LED activ.log. 0
	8	Buzzer activ.log. 0
J7	1	+ 5 V DC - feed 2. head
	2	+12 V DC - feed 2. head
	3	0 V
	4	SDA - I2C data 2. head
	5	SCLK - I2C clock 2. head

Bus RS 485

DIP switch	Meaning in ON state
Echo	Automatic recieve on
PullUp+	Line hold – pull up
PullDown-	Line hold – pull down
Terminator 120 Ω	End of bus integrated

While connecting the control unit to the RS 485 bus take care of impedance balance of the line, the 120 Ω must be connected at the beginning and the furthest connection point of the bus.
The terminators PullUp and PullDown of the link must be connected only to one of the connected devices on the RS 485 bus.

Explanation of dragON technology



Inputs/Outputs

The control unit contains predefined inputs and outputs. Their function is apparent from the connector description J4. The active state of the inputs is given by the configuration of the control unit, and configuration can only be done from the configuration utility.
While using the outputs (relay contacts) and controlling the charge of an inductive character the contacts must be connected correctly to the control unit. **The positive pole of the controlled charge always must be connected to the NO or NC contacts.** While controlling the electromagnetic locks the safety diode must be connected in reverse direction.

Explanation of APERIO technology