

**DESCRIPTION**

Local expansion module with 16 32 bit (2 x 16 bit words) counters. For each counter a RESET function is provided. All inputs simultaneously function as ordinary inputs, reporting the immediate status. If less than 16 counters are required the unused inputs could be used as ordinary digital inputs (as in UCB - 16 DI). Normal expansion modules may be connected after this expansion module if required.

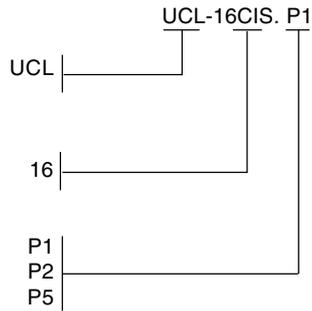
**VERSIONS/ORDERING CODES**

Type:

I/O Expansion module:

**Counter input:**  
**Number of inputs**  
16

**Input voltage range**  
10 - 30V DC uni polar  
30-60V DC uni polar  
48-72V DC bi polar

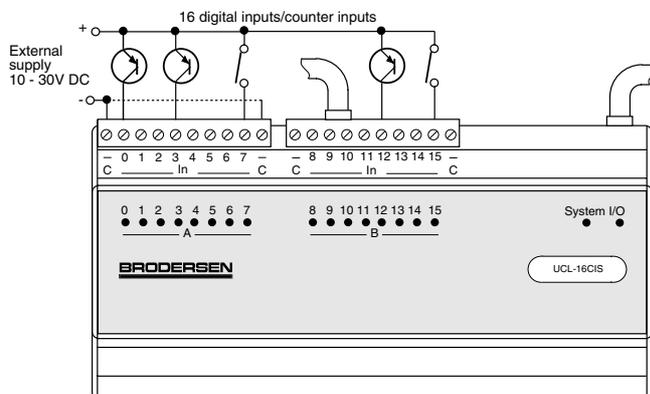


**PROTOCOL/DATABASE INTERFACE**

I/O type	Words	IO assignment) (B-CONW	Description
DI	1	DI0	Read input status
CI0	2	DI1 (LSB) DI2 (MSB)	First counter
CI1	2	DI3 (LSB) DI4 (MSB)	Second counter
CI2	2	DI5 (LSB) DI6 (MSB)	
CI3	2	DI7 (LSB) DI8 (MSB)	
.	.	.	
CI14	2	DI29 (LSB) DI30 (MSB)	
CI15	2	DI31 (LSB) DI32 (MSB)	Last counter
DO	1	DO0	Reset counter, note 2

Total 34

**WIRING DIAGRAM**



**Digital input/output**

Counter input, UCL - 16 CIS.Px

**TECHNICAL DATA**

<b>Input delay:</b>	Typical 2ms
<b>Active input voltage:</b>	P1: 10-30V DC/uni polar P2: 30-60V DC/uni polar P5: 48-72V DC/bi polar
<b>Inactive input voltage:</b>	0V to +3V DC
<b>Input current:</b>	P1: Typical: 3mA@12V DC 5mA@24V DC  P2: Typical: 3mA@30V DC 5mA@60V DC  P5: Typical: 3mA@48V DC 5mA@72V DC
<b>Max. counting frequency:</b>	80Hz (6ms pulse/6ms pause)
<b>Counter range:</b>	32 bit (4.294.967.296)
<b>Isolation (input to electronics):</b>	1kV AC.
<b>Indicators:</b>	
Digital input:	One for each digital input (red) indicating active input.
System:	Indicating module OK (green)
I/O:	Indicating I/O and local bus OK (green)

**GENERAL**

<b>Current consumption (12V):</b>	max 80 mA.
<b>Ambient temperature:</b>	-10 - +55°C.
<b>EMC:</b>	EN 50081-1/EN50082-2.
<b>Climatic:</b>	
Dry heat:	IEC 68-2-2, Test Bd, Temp. +55°C, Duration 8h.
Cold:	IEC 68-2-1, Test Ad, Temp. -10°C, Duration 8h.
Damp heat:	IEC 68-2-3, Test Ca, Temp. 40°C, RH 95%, Duration 8h.
<b>Mechanical:</b>	
Vibration:	IEC 68-2-6, Test Fc (sinusoidal), Freq. 10-150Hz, Amp. 4g, 5 sweeps in 3 orthogonal axes.
Shock:	IEC 68-2-27 (half sine), Acc. 15g, Pulse time 11msec., 3 x 6 shocks.
<b>Protection:</b>	IP20.
<b>Mounting:</b>	35 mm DIN-rail, EN50022.
<b>Terminals:</b>	Max. 1.5 mm <sup>2</sup> wire.
<b>Housing:</b>	Anodized aluminium with plastic ends. According to DIN 43880.
<b>Dimensions:</b>	
HxWxD:	80(+connectors)x162x62 mm.

**NOTES/REMARKS**

- 1) If only 16 bit counter capacity is required (max. 65535) the most significant word may be disregarded.
- 2) An active bit clears the corresponding counter. The counter is kept cleared until bit becomes inactive, however max. 5 sec.
- 3) There is no battery back-up for counter values. Counter data will be lost at power off.