OPTO_OUT1 R28 680R

U7 CPC1002NTR D33 SMAJ33A

OPTO_OUT2 R29 680R

U6 CPC1002NTR D34 SMAJ33A

CN2
Phoenix1844278

OPTO_IN1 R91 330R R26 330R
U5 CPC1002NTR D35 SMAJ33A

OPTO_IN2 R118 330R R27 330R
U4 CPC1002NTR D36 SMAJ33A

1 = OPTO OUT1+	max current: 600 mA
2 = OPTO OUT1−	
3 = OPTO OUT2+	max open voltage: 30 V
4 = OPTO OUT2−	
5 = OPTO IN1+	max input voltage: 24 V (typ. 12 V)
6 = OPTO IN1−	
7 = OPTO IN2+	minimum voltage to activate: 3.5 V
8 = OPTO IN2−	

Phoenix Contact
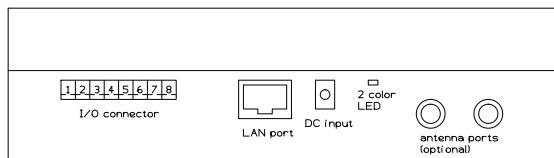1844278 pcb header 3.5mm pitch MC series
1840421 cable plug⬜

Typical voltage for inputs is 5-15V
For >15V, it is recommended to include a series resistor
e.g for 24V, a 1000 Ohm/0.5W resistor is recommended

Optocoupler

I led = 3mA
Vf = 1.2V
I led. max = 50 mA
R on = 0.55 Ohm
I load.max = 700 mA
Vmax = 60V
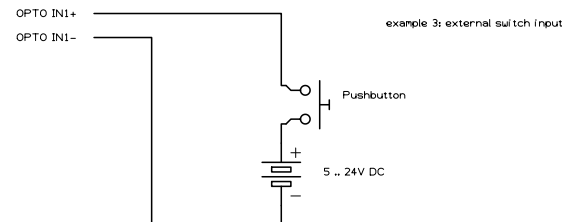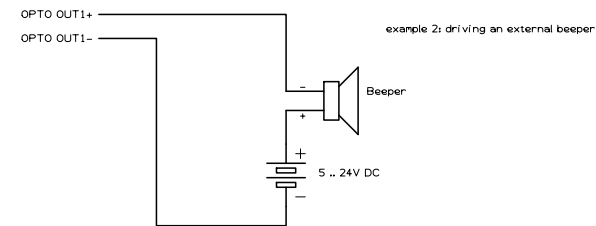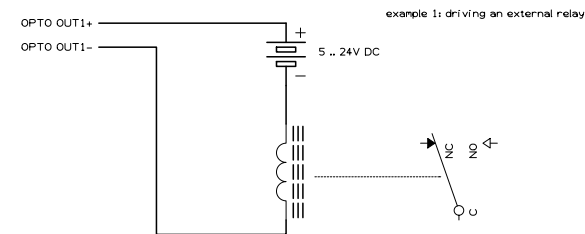Protection diodes start conducting at 33V
Usable maximum voltage = 48V

some examples

OPTO OUT1+
OPTO OUT1−   5 .. 24V DC   example 1: driving an external relay
NC NO C

OPTO OUT1+
OPTO OUT1−   Beeper   example 2: driving an external beeper
5 .. 24V DC

OPTO IN1+
OPTO IN1−   example 3: external switch input
Pushbutton
5 .. 24V DC

side view

1 2 3 4 5 6 7 8
I/O connector   LAN port   DC input   2 color LED   antenna ports (optional)

Sense & Control logic definitions

logic port	0	1 *
in1	Vin1 < 1 V	Vin1 > 3.5 V
in2	Vin2 < 1 V	Vin2 > 3.5 V
out1	switch off	switch on *
out2	switch off	switch on *

* An output may also be switched on by any non-zero number