

CPI is intended to convert a PWM signal from an electronic control unit (PLC) to an analogue output current in the range of 4....20 mA.

The output current value depends on the duty-cycle of the PWM signal, not on its amplitude or frequency.

Major development focus was on high AC-Rejection and little ripple voltage on the output signal. The Standard version can be used at a PWM frequency of 50 Hz and higher.



Technical Data	
Supply Voltage / Current	11.....30 V / 40 mA max
Output signal (0....100% duty-cycle)* ¹	4.....20 mA
Output shuntresistor (Vb=24V)	100.....600 Ohms * ²
Input impedance	ca. 5000 Ohms* ³
Linearity (current vs. duty-cycle)	< 0,5% (of end-value)
Ripple @ 20 Hz PWM frequency	< 450 mV
Ripple @ 50 Hz PWM frequency	< 60 mV
Ripple @ 100 Hz PWM frequency	< 25 mV
Temperature range operational/stationary	-25°...+70°C / -40°...+85°C
Protection class	IP 20 (IP 67 on request)
Casing Material	ABS plastic * ⁴
L x H x W	45 x 30 x 20 mm
Connection cable	0,4 m with open ends 4-core wires Vb=red, GND=black, PWM_in=yellow,current_out=orange

Notes:

- *1) Customer-specific adjustment possible
- *2) Design is not calibrated to zero dependency of current to shunt resistor; hence shunt resistor shall have a fixed value
- *3) PWM output of PLC must be sufficiently loaded
- *4) for very rough conditions, CPI is available in aluminium casing as well

all values specified at 25°C