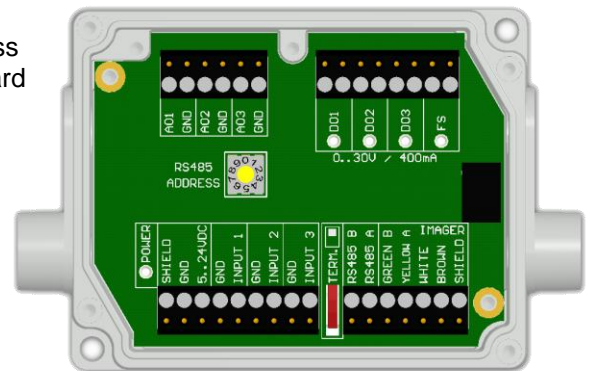# Technical Note

Industrial Process Interface for optris Xi 80 and Xi 410

For use in industrial environment an industrial process interface with 500 VAC$_{RMS}$ isolation voltage between Xi 80/410 and process is available (connection box with IP65, 5 m, 10 m or 20 m standard or high temp cable for camera connection, terminal for process integration).

Pin assignment PIF cable (industrial process interface)

GREEN	RS485 B
YELLOW	RS485 A
WHITE	12 V
BROWN	GND
SHIELD	GND

The industrial process interface offers the following inputs and outputs:

Name	Description	max range[1]/ status
INPUT 1 / 2 / 3	Analog or digital input	0-10 V [2]
AO1 / 2 / 3	Analog output 1, 2 and 3	0-10 V
	Alarm output 1, 2 and 3	0/4-20 mA
DO1 / 2 / 3	Relay output 1, 2 and 3	open/ closed (red LED on) / 0...30 V, 400 mA
FS	Fail-safe relay	open/ closed (green LED on)/ 0...30 V, 400 mA

[1] depending on supply voltage
[2] the AI is designed for max. 24 V, the voltage level above 10 V is not interpreted

The process interface has an integrated fail-safe mode. This enables a complete monitoring of the Xi 80/410 hardware and software like interruption of cables, shut-down of the software etc.
The PIF has a separate fail-safe relay output (0-30 V/ 400 mA).

Controlled conditions on camera and software	Industrial Process interface ACXIPIFCBxx
Interruption USB cable to camera	✓
Interruption data cable camera – PIF	✓
Interruption power supply PIF	✓
Shut-down of software	✓
Crash of software	✓
Fail-Safe output	Open contact (Fail-safe relay) / red LED on

ℹ The industrial PIF has a maximum of 3 analog outputs. To use more outputs, you can cascade up to three PIFs via RS485, allowing you to use up to 9 analog or alarm outputs in total.