

# ICP COM Devices - DI and DO in MatDeck

In this example, we illustrate the use of GUIs for ICP COM Devices, and Digital Input and Output channels.

## Configuration of ICP COM M-7026 Devices

The most effective and intuitive way for configuring the ICP COM devices is by using MatDeck's GUI configuration forms which can be found in the functions tab under 'Devices - ICP COM 7000 Forms'. There are altogether six forms which cover different types of ICP COM 7000 series. These forms are:

- icpcom\_multifunction7000\_form(),
- icpcom\_analogoutput7000\_form(),
- icpcom\_digitalinput7000\_form(),
- icpcom\_analoginput7011\_7016\_form(),
- icpcom\_analoginput7017\_7019\_form(),
- icpcom\_pwmcounter7000\_form().

Here, we configure the ICP COM M-7026 device:

```
form := icpcom_multifunction7000_form(0, "Form")
```

ICP DAS Multifunction Series 7000 Configuration Form: M-7002, M-7003, M-7026, and M-7024U

Module Selection

Device List - Address and ID

01 7026

Module Configuration

Address 1 Fast Mode Fast

Analog Format Engineering

Response Delay 0 ms Filter 60Hz Rejection

INIT Configuration

Protocol DCON Parity N,8,1

Baud Rate 9600 Checksum Disable

AI(0:3) AI(4:7) AO(0:3) DO(0:3) DI(0:4) Host WDT

Ch 0 Ch 1 Ch 2 Ch 3

Set to Power on Value

1 1 1 0

Set to Safety Value

1 1 1 0

Use as SCADA Tag  Use as SCADA Tag  Use as SCADA Tag  Use as SCADA Tag

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## Using M-7026 Device DI and DO

In this example scenario, DO0 is connected to DI0. The first step is to open the device M-7026 which will be used for the digital output and digital input. The open function returns the device's handle which is used in later operations to access the appropriate device.

```
1 dev := icpcom_opendev("COM4,9600,N,8,1")
```

The output digital value is set using the DO write function. The input value can be read using the standard DI read function. The result is shown in the canvas:

```
2 icpcom_do_write(dev, 1, 3, 1)
3 dvalue := icpcom_di_read(dev, 1, 3)
```

Once done, we will finish by closing the device and releasing the handle

```
4 icpcom_closedev(dev)
```

```
dvalue = 1
```