



UR20 Digital Input Modules

UR20-8DI-P-3W

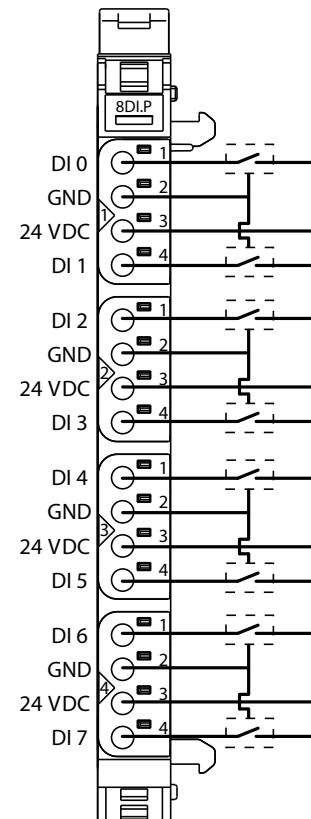
The digital input module UR20-8DI-P-3W can detect up to 8 binary control signals. Two sensors can be connected to each connector using a 2-wire or 3-wire connection. A status LED is assigned to each channel. The module electronics supply the connected sensors with power from the input current path (I_{IN}).

- For use with dry contact or PNP type sensors.



Technical Specifications - UR20-8DI-P-3W	
Price	\$88.00
Drawing	PDF
Inputs	
Number	8
Input type	P-switching (sinking inputs), for Type 1 and Type 3 sensors as per IEC 61131-2
Input filter	Input delay adjustable from 0 to 40 ms
Low input voltage	< +5V referred to 0V of the input power supply U_{IN}
High input voltage	> +11V referred to 0V of the input power supply U_{IN}
Sensor supply	max. 2A per plug, total max. 8A
Sensor connection	2-wire, 3-wire
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Supply	
Supply voltage for system, inputs and outputs	24 VDC +20% / -15%
Current consumption from system current path I_{SYS}	8 mA
Current consumption from input current path I_{IN}	< 30 mA + sensor supply current
Weight	
Weight (operational status)	83g

Terminal Connections





UR20 Digital Input Modules

UR20-8DI-N-3W

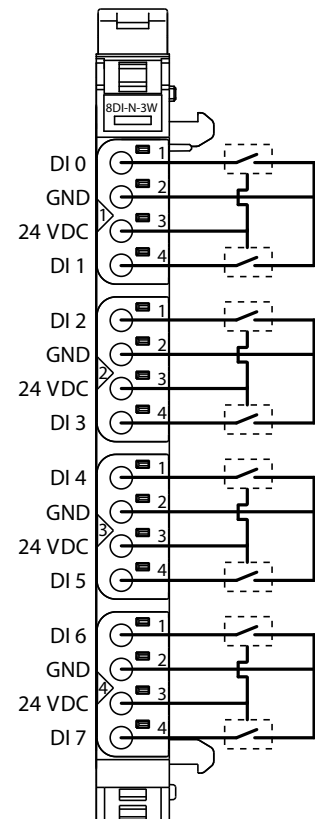
The digital input module UR20-8DI-N-3W can detect up to 8 binary control signals. Two sensors can be connected to each connector using a 2-wire or 3-wire connection. The inputs are N-switching (sourcing). A status LED is assigned to each channel. The module electronics supply the connected sensors with power from the input current path (I_{IN}).

- For use with dry contact or NPN type sensors.



Technical Specifications - UR20-8DI-N-3W	
Price	\$96.00
Drawing	PDF
Inputs	
Number	8
Input type	N-switching (sourcing inputs), for Type 1 and Type 3 sensors as per IEC 61131-2
Input filter	Input delay adjustable from 0 to 40 ms
Low input voltage	> +5V referred to +24V of the input power supply U_{IN}
High input voltage	< -11V referred to +24V of the input power supply U_{IN}
Sensor supply	Max. 2A per plug, total max. 8A
Sensor connection	2-wire, 3-wire
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Supply	
Supply voltage for system, inputs and outputs	24 VDC +20% / -15%
Current consumption from system current path I_{SYS}	8 mA
Current consumption from input current path I_{IN}	< 20 mA + sensor supply current
Weight	
Weight (operational status)	83g

Terminal Connections





UR20 Digital Input Modules

UR20-16DI-P

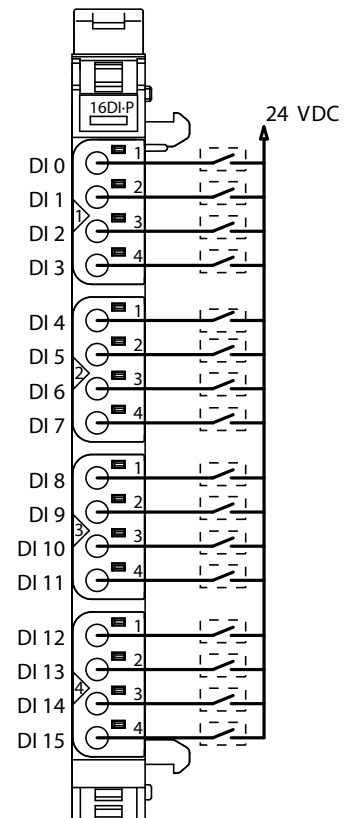
The UR20-16DI-P digital input module can detect up to 16 binary control signals. Four sensors can be connected to each connector in a 1-wire connection. A status LED is assigned to each channel. The connected sensors must be supplied with power from the input current path I_{IN} .

- For use with dry contact or PNP type sensors.

Technical Specifications - UR20-16DI-P	
Price	\$117.00
Drawing	PDF
Inputs	
Number	16
Input type	P-switching (sinking inputs), for Type 1 and Type 3 sensors as per IEC 61131-2
Input filter	Input delay adjustable from 0 to 40 ms
Low input voltage	< +5V referred to 0V of the input power supply U_{IN}
High input voltage	> +11V referred to 0V of the input power supply U_{IN}
Sensor supply	No
Sensor connection	1-wire
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Supply	
Supply voltage for system, inputs and outputs	24 VDC +20% / -15%
Current consumption from system current path I_{SYS}	8 mA
Current consumption from input current path I_{IN}	< 25 mA
Weight	
Weight (operational status)	87g



Terminal Connections





UR20 Digital Input Modules

UR20-16DI-N

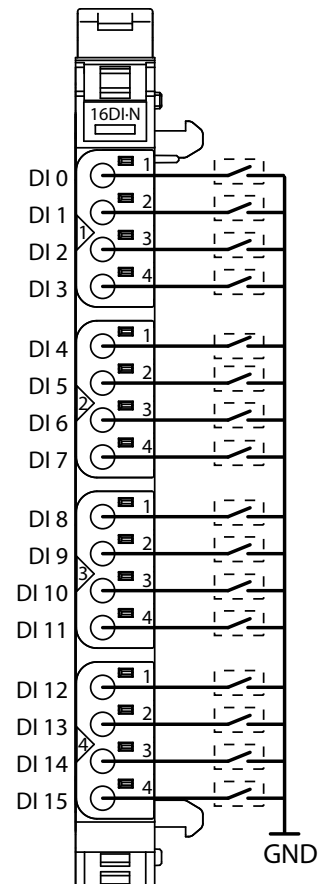
The UR20-16DI-N digital input module can detect up to 16 binary control signals. Four sensors can be connected to each connector in a 1-wire connection. The inputs are N-switching (sourcing). A status LED is assigned to each channel. The connected sensors must be supplied with power from the input current path I_{IN} (e.g., with potential distribution modules).

- For use with dry contact or NPN type sensors.



Technical Specifications - UR20-16DI-N	
Price	\$125.00
Drawing	PDF
Inputs	
Number	16
Input type	N-switching (sourcing inputs), for Type 1 and Type 3 sensors as per IEC 61131-2
Input filter	Input delay 3 ms
Low input voltage	> +5V referred to +24V of the input power supply U_{IN}
High input voltage	< -11V referred to +24V of the input power supply U_{IN}
Sensor supply	No
Sensor connection	1-wire
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Supply	
Supply voltage for system, inputs and outputs	24 VDC +20% / -15%
Current consumption from system current path I_{SYS}	8 mA
Current consumption from input current path I_{IN}	< 15 mA
Weight	
Weight (operational status)	88g

Terminal Connections





UR20 Module Specifications

Environmental Specifications - UR20 I/O Modules		
Degree of protection (IEC 60529)		IP20
Flammability rating UL 94		V-0
Material of power contacts and data contacts		Ni-Au, 3µm
Temperature	Operation	-20 + 60 °C [-4 to +140 °F]
	Storage, transport	-40 to +85 °C [-40 to +185 °F]
Humidity	Operation	95%, non-condensing as per IEC 61131-2
	Storage, transport	95%, non-condensing as per IEC 61131-2
Air pressure	Operation	≥ 795 hPa [11.5 psi] (altitude ≤ 2000 m) as per IEC 61131-2
	Storage, transport	≥ 700 hPa [10.2 psi] (altitude ≤ 3000 m) as per IEC 61131-2
Vibration resistance		5 Hz ≤ f ≤ 8.4 Hz: 3.5mm amplitude as per IEC 60068-2-6 8.4 Hz ≤ f ≤ 150 Hz: 1g acceleration as per IEC 60068-2-6
Shock resistance		15g over 11 ms, half sinewave, as per IEC 60068-2-27
Potential isolation	Test voltage	Max. 28.8V within one channel 500 VDC field/system (as per EN 60079-15:2017)
	Pollution severity level	2 (as per DIN EN 60664-1:2008)
	Overvoltage category	II (as per DIN EN 50178)
Approvals		CE, RoHS, UKCA, cULus E141197