## **Data sheet**



## **UR-DS Series**

FASTUS IO-Link hub

**UR-DS16D** 

**UR-DS8D8T** 

**UR-DS16T** 

	Item		Specifications		
Jnit			IO-Link Digital I/O hub		
Model code			UR-DS16D	UR-DS8D8T	UR-DS16T
	Number of points		1 (Use either spring clamp terminal blocks or e-CON socket)		
Interface	IO-Link	Version	1.1		
		Master/Device	Operates as device		
		Communication speed	COM3 (230.4 kbps)		
		Process input data	2 bytes	2 bytes	2 bytes
		Process output data	1 byte	3 bytes	4 bytes
		Minimum cycle time	0.4 ms	0.6 ms	0.5 ms
		Cable length	Maximum 20 m		
I/O terminal	Number of points		16 (spring clamp terminal block)*UR-DE:		: e-CON socket
	Digital input	Points	16	8	-
		Type of input	Source, PNP or Sink, NPN (selectable for all channel)		-
		Dielectric withstanding	500 VAC for one minute between		-
		voltage	I/O terminal batch and IO-Link batch		
		Insulation resistance	10 M ohm or higher between I/O terminal batch and IO-Link batch		-
		Common	Shared with 16 channels	Shared with 8 channels	-
		Rated input voltage	24 VDC including ripple (P-P) 5 %		-
		Rated input current (typical values)	4.9 mA		-
		Insulation method	Photocoupler insulation		-
		Maximum number of Simultaneous input points	100 % simultaneous ON		-
		Voltage and current at ON	15 V or higher, 3 mA or higher		-
		Voltage and current at OFF	8 V or less, 1.5 mA or less		-
		Input resistance	4.7 k ohm		-
		Input response time	0 to 200 ms (1 ms unit, default value of 10 ms)		-

Item			Specifications			
Model code			UR-DS16D	D UR-DS8D8T UR-DS16T		
		Points	-	8	16	
	Digital output	Type of output	-	Source, PNP or Sink, NPN (selectable per channel)		
		High current output function	-	Channel C to F for Source, PNP, output		
		Rated load voltage	-	12/24 VDC (allowable voltage from 10.2 to 28.8 VDC		
		Maximum load current	-	Standard output: 0.5 A per point High current output: 4 A per point		
		Maximum total load	-	12 A		
		current				
		Maximum inrush current	-	6 A		
/O terminal		Output residual voltage	-	Standard output: 1.2 V or less		
		at ON		High current output: 0.4 V or less		
		Leak current at OFF	-	0.1 mA or less		
		Output response time	-	0.2 ms or less (OFF to ON) 1.5 ms or less (ON to OFF)		
		Surge suppressor	-	Zener diode		
		I/O power supply		12/24 VDC		
		voltage	-	(allowable voltage from 10.2 to 28.8 VDC		
		I/O power current				
		consumption	-	55 mA max. (at 24 VDC)		
		Output reverse voltage	_	Standard o	output: Yes	
		protection		High curren	t output: No	
		Common	-	Switchable per channel		
Power supply voltage		e	$24$ VDC $\pm$ 15 % (SELV and LIM power supplies or Class 2 power supplies)*1			
	Current consumption		50 mA max. (at 24 VDC)			
 Size	<u> </u>		85 × 63 × 39.9 mm (W × H × D)			
Weight			Approx. 115 g (including terminal blocks, when not wired)			
	Operation temperature/humidity		0 to +55 $^{\circ}$ C/5 to 95 $^{\circ}$ RH (no freezing and no condensation)			
	Storage temperature/humidity		-25 to +75 ℃/5 to 95 % RH (no freezing and no condensation)			
	Vibration resistance		IEC 61131-2 compliant			
Environmental	Shock resistance		IEC 61131-2 compliant			
resistance	Atmosphere		No corrosive gas			
	Operating altitude		0 to 2000 m			
	Installation location		In door use			
Degree of protection			IP20			
Measurement category			II or lower			
Pollution degree			2 or lower			
	CE marking	EMC	EMC Directive (2014/30/EU)			
Applicable regulations		Environment	RoHS Directive (2011/65/EU)			
	China RoHS	China RoHS Environment		Regulation 32		
Applicable standard			EN 61131-2			

<sup>\*1.</sup> Use a Class 2 power supply or a power supply compliant with SELV (Safety Extra-Low Voltage) circuit and LIM (Limited Energy Circuit) circuit standards.