

Specifications

Subject		Specifications	
Model		UAM-05LP-T301	
Detection Property	Protection Range	Max: 5m	
	Warning Range	Max: 20m (Non-safety) ¹⁾	
	Distance Tolerance ²⁾	+100mm	
	Detection Capability	From Black-Reflector sheet(1.8%) to Retro- Reflector Sheet	
	Detection Range	270°	
	Minimum Detectable Width		φ30mm (Max : 1.8m)
			φ50mm (Max : 3.0m)
			φ70mm (Max : 5.0m)
	Scan Frequency	30ms (Rotational Speed 2000rpm)	
	Area Pattern	MAX 32 patterns	
Response Time		OFF : 60ms ~ 510ms	
		ON : 270ms ~ 510ms	
Optics	Element	Pulsed Laser Diode	
	Wavelength	905nm	
	Safety class	Laser Class 1	
Type		Type 3 (IEC61496-1,IEC61496-3)	

Functional Safety		SIL 2(Type B, HFT=1) (IEC61508)
PFHd		7.8×10 ⁻⁸ (T1=20year) : When master slave function is not in use
		1.6×10 ⁻⁷ (T1=20year) : When master slave function is in use
Housing	Size	80.0mm (W) , 80.0mm (D) , 95.0mm (H) (without cable)
	Weight	0.8kg
	Protection	IP65
	Case Material	Body : Aluminum / Optical Window : Polycarbonate
	Conenection Cable	Flying lead cable length : 3m
Power supply		DC 24V ±10% : when operating with converter power supply
		DC 24V -30%/+20% : when operating with battery
Supply power	Normal (without load)	6W
	Max.(with load)	50W
Output	OSSD1/2 (Safety)	Output type (High side SW)
		Output current (Max : 500mA) ^{*3}
		Leak current (Max : 1mA)
		AWG 26
		Load tolerance (L/R=25ms, C=1μF)

	<p>OSSD3/4(Safety)</p> <p>WARNING 1/2</p> <p>(Non-Safety)</p>	<p>Output types (High side SW)</p> <p>Output current : (Max : 250mA)³</p> <p>Leak current (Max : 1mA)</p> <p>AWG 28</p> <p>Load tolerance (L/R=25ms, C=1μF)</p>
	<p>RES_REQ 1</p> <p>RES_REQ 2</p> <p>MUT_OUT 1</p> <p>MUT_OUT 2</p>	<p>Output types (PNP Transistor)</p> <p>Output current : (Max : 200mA)³</p> <p>Leak current (Max : 1mA)</p> <p>AWG 28</p>
Input	<p>Area pattern 32</p> <p>(5 Inputs × 2</p> <p>Channels)</p> <p>EDM1/EDM2</p> <p>MUTING1/MUTING2</p> <p>MUTING3/MUTING4</p> <p>OVERRIDE1</p> <p>OVERRIDE2</p> <p>RESET1/RESET2</p> <p>ENC_A1/ENC_A2</p> <p>ENC_B1/ENC_B2</p>	<p>Input Impedance 4.7 kΩ</p> <p>AWG28</p>
Interface	Configuration	USB2.0 (USB micro type-B connector)
	Data output	Ethernet 100BASE-TX (Water proof connector)
	Temperature	-10 to + 50 degrees C (No frost)

Environmental Resistance	Storage Temperature	-25 to + 70 degrees C (No frost)
	Humidity	95% RH with no condensation
	Storage Humidity	95% RH with no condensation
	Surrounding illumination ⁴	Less than 1500lx
	Vibration	Frequency range : 10~55 Hz Sweep rate : 1octave/min
		Amplitude : 0.35mm ±0.05mm
Shock resistance	Acceleration : 98m/s ² (10G) Pulse duration : 16 ms	
Outdoor Operation	Not permitted	
Altitude	Below 2000m	