

Световые лучи и элементы управления S300 SG ST4, S5 SL5, SG BWS

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(727)345-47-04

Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: dob@nt-rt.ru || сайт: <https://datasensor.nt-rt.ru/>

S300 SG ST4

OVERVIEW

The emitter-receiver photocells of the Sx-F/G-SG-ST series have been homologated to function with the control units of the SG-BWS series that together form a safety system respectively of Type 2 and Type 4 conforming with the EN 954-1 and EN ISO 13849-1 Standards. The photocells are available in the M18 tubular plastic format with infrared emission of the S5 series for distances reaching 8m, M18 plastic tubular format with laser emission of the SL5 series with operating range reaching 40m, and MAXI format with infrared emission of the new S300 series with operating range reaching a respective ly 50m for Type 2 and 40m for Type 4 models. Together with S300 standard models DEFOGGING MODELS with heated front glass are available for applications where sudden changes of the temperature in the nearby of the sensor are causing condensation. All models are equipped with M12 4-pole connector: no cable or terminal block models are available. LEDs signal both the operating status and correct alignment of the safety photocells.



APPLICATIONS

Automatic warehouses

Machines for food packaging

Robots

Automatic assembling lines

• Machines for PCB production

TECHNICAL SPECIFICATION

S5/SL5

	SL5...SG-ST4	S5...SG-ST2/ST4
Power supply	24 Vdc $\pm$ 15%	
Consumption (excluded output current):	35 mA max.	30 mA max.
Outputs:	PNP (short-circuit protection)	
Output current:	100 mA max.	
Output saturation voltage:	2 V max.	
Leakage current:	50 μ A at 30 Vdc	
Response time:	1 ms max.	
Switching frequency:	500 Hz max.	
Operating temperature:	-10 ... 50 °C	-25 ... 55 °C
Storage temperature:	-25 ... 70 °C	
Dielectric strength:	500 Vac / 1 min. between electronic parts and housing	
Insulating resistance	>20 M Ω / 500 Vdc, between electronic parts and housing	
Operating distance (min. values):	0 ... 40 m	0 ... 8 m

Emission type:	red Laser (650 nm) Class I EN 60825-1 (1994)	LED infrared 880 nm
Effective aperture angle:	xx...ST2 = ± 5° / xx...ST4 = ± 2.5°	
Ambient light rejection:	according to EN 60947-5-2	
Vibration:	0.5 mm amplitude, 10 ... 55 Hz frequency, for each axis (EN60068-2-6)	
Shock resistance:	11 ms (30 G) 6 shocks for each axis (EN60068-2-27)	
Housing material:	ABS UL 94V-O	
Connector/gland material:	Polycarbonate	
Lens material:	PMMA	
Mechanical protection:	IP67	
Connections:	M12 4-pole connector	
Weight:	30 g. max	

S300

DC MODELS	S300...2/5-G/F-ST2/ST4	
Power supply	24 VDC ±15%	
Ripple	10 % max	
Consumption (excluded output current):	S300...F: < 25mA S300...G: < 20 mA	
Outputs:	PNP NC open collector	
Output current:	100 mA (resistive load)	
Output saturation voltage:	2.4 V max	
Diagnostic functions	Test- input	
Response time:	1 ms	
Switching frequency:	500 Hz	
Weight:	140 g	
Common Data	S300...G	S300...F
Emission type:	INFRARED LED (880nm)	
Operating distance (typical value):	S300...ST2: 0..50m S300...ST4: 0..40m	
EAA:	S300...ST2: ± 5° / S300...ST4: ±2.5°	
Indicators:	POWER ON LED (GREEN)	OUTPUT LED (YELLOW), STABILITY LED (GREEN)
Operating temperature:	-40...55 °C	
Storage temperature:	-40...70 °C	
Insulating resistance	> 20 MΩ, 500 VDC between electronics and housing	
Ambient light rejection:	EN 60947-5-2	
Vibration:	0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)	
Shock resistance:	11 ms (30 G) 6 shock for every axis (EN60068-2-27)	
Housing:	PBT 30% Glass fiber-reinforced	
Lenses:	frontal window and lens in PC	
Protection class:	IP67 (IEC / EN60529) / cable gland EN50262	
UL requirements:	Class 2 power supply; 60-70°C copper conductor 24-20 AWG; Type I Enclosure	
Connections:	see the "CONNECTIONS" paragraph	

S5 SL5

OVERVIEW

The emitter-receiver photocells of the Sx-F/G-SG-ST series have been homologated to function with the control units of the SG-BWS series that together form a safety system respectively of Type 2 and Type 4 conforming with the EN 954-1 and EN ISO 13849-1 Standards. The photocells are available in the M18 tubular plastic format with infrared emission of the S5 series for distances reaching 8m, M18 plastic tubular format with laser emission of the SL5 series with operating range reaching 40m, and MAXI format with infrared emission of the new S300 series with operating range reaching a respective ly 50m for Type 2 and 40m for Type 4 models. Together with S300 standard models DEFOGGING MODELS with heated front glass are available for applications where sudden changes of the temperature in the nearby of the sensor are causing condensation. All models are equipped with M12 4-pole connector: no cable or terminal block models are available. LEDs signal both the operating status and correct alignment of the safety photocells.



APPLICATIONS

Automatic warehouses

Machines for food packaging

Robots

Automatic assembling lines

• Machines for PCB production

TECHNICAL SPECIFICATION

S5/SL5

	SL5...SG-ST4	S5...SG-ST2/ST4
Power supply	24 Vdc $\pm$ 15%	
Consumption (excluded output current):	35 mA max.	30 mA max.
Outputs:	PNP (short-circuit protection)	
Output current:	100 mA max.	
Output saturation voltage:	2 V max.	
Leakage current:	50 μ A at 30 Vdc	
Response time:	1 ms max.	
Switching frequency:	500 Hz max.	
Operating temperature:	-10 ... 50 °C	-25 ... 55 °C
Storage temperature:	-25 ... 70 °C	
Dielectric strength:	500 Vac / 1 min. between electronic parts and housing	
Insulating resistance	>20 M Ω / 500 Vdc, between electronic parts and housing	
Operating distance (min. values):	0 ... 40 m	0 ... 8 m

Emission type:	red Laser (650 nm) Class I EN 60825-1 (1994)	LED infrared 880 nm
Effective aperture angle:	$xx...ST2 = \pm 5^\circ / xx...ST4 = \pm 2.5^\circ$	
Ambient light rejection:	according to EN 60947-5-2	
Vibration:	0.5 mm amplitude, 10 ... 55 Hz frequency, for each axis (EN60068-2-6)	
Shock resistance:	11 ms (30 G) 6 shocks for each axis (EN60068-2-27)	
Housing material:	ABS UL 94V-O	
Connector/gland material:	Polycarbonate	
Lens material:	PMMA	
Mechanical protection:	IP67	
Connections:	M12 4-pole connector	
Weight:	30 g. max	

S300

DC MODELS	S300...2/5-G/F-ST2/ST4	
Power supply	24 VDC $\pm 15\%$	
Ripple	10 % max	
Consumption (excluded output current):	S300...F: < 25mA S300...G: < 20 mA	
Outputs:	PNP NC open collector	
Output current:	100 mA (resistive load)	
Output saturation voltage:	2.4 V max	
Diagnostic functions	Test- input	
Response time:	1 ms	
Switching frequency:	500 Hz	
Weight:	140 g	
Common Data	S300...G	S300...F
Emission type:	INFRARED LED (880nm)	
Operating distance (typical value):	S300...ST2: 0..50m S300...ST4: 0..40m	
EAA:	$S300...ST2: \pm 5^\circ / S300...ST4: \pm 2.5^\circ$	
Indicators:	POWER ON LED (GREEN)	OUTPUT LED (YELLOW), STABILITY LED (GREEN)
Operating temperature:	-40...55 °C	
Storage temperature:	-40...70 °C	
Insulating resistance	> 20 M Ω , 500 VDC between electronics and housing	
Ambient light rejection:	EN 60947-5-2	
Vibration:	0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)	
Shock resistance:	11 ms (30 G) 6 shock for every axis (EN60068-2-27)	
Housing:	PBT 30% Glass fiber-reinforced	
Lenses:	frontal window and lens in PC	
Protection class:	IP67 (IEC / EN60529) / cable gland EN50262	
UL requirements:	Class 2 power supply; 60-70°C copper conductor 24-20 AWG; Type I Enclosure	
Connections:	see the "CONNECTIONS" paragraph	

SG BWS

OVERVIEW

- ✓ Installation Flexibility
- ✓ Long distance
- ✓ Low temperature with defogging function
- ✓ 4 safety areas controlled with one unit
- ✓ Double muting



APPLICATIONS

Robots

Automatic assembling lines

Palletizers and Depalletizers

TECHNICAL SPECIFICATION

	S5	SL5	S300
GENERAL DATA			
Format	M18 Tubular		Rectangular
Light Emission	Infrared LED 880 nm	Class 1 Red laser (650 nm)	Infrared LED 880 nm
Type (EN61496-1)	2/4 depending on model	4	2/4 depending on model
Effective Aperture Angle (EN61496-2)	-/+ 2.5° for Type 4 models -/+ 5° for Type 2 models		
Operating distance	0 ... 8 m	0 ... 40 m	0 ... 50 m (S300...ST2) 9 ... 40 m (S300...ST4)
ELECTRICAL DATA			
Power supply (Vdc)	24 Vdc ± 15%		
Outputs	PNP (short circuit protection)		
Output current:	100 mA max.		
Response time:	1 ms max.		
MECHANICAL AND ENVIRONMENTAL DATA			
Operating temperature	-25 ... 55°C	-10 ... 50 °C	-40 ... 55 °C
Mechanical protection (EN 60529):	IP 67		
Housing Material	Polycarbonate, ABS		PBT

Window material	PMMA			Polycarbonate
	SG-BWS-T4	SG-BWS-T4-2	SG-BWS-T4-MT	SG-BWS-T4-2-MT
GENERAL DATA				
PL (EN ISO 13849-1)	e			
SIL (IEC 61508)	3			
ELECTRICAL DATA				
Power supply	24 Vdc -15/+10%			
PNP Outputs from S5/SL5/S300	4			
OSSDs couples from SLC		2		
Muting inputs		4		
Test, Reset, Override, EDM, Muting enable, Auto/Man Selector	3	9		
Output				
Safety outputs	2 PNP	2 NO		
Muting lamps		2		
Test outputs	4	4		
Response time:	29 ms	33 ms	35 ms	39 ms
MECHANICAL AND ENVIRONMENTAL DATA				
Operating temperature	0 ... +55°C			
Humidity	15 ... 95 % (no condensation)			
Mechanical protection	IP20			
FUNCTIONS B				
Single beams pairs (Rx/Tx) monitored	4	8	4	8
Automatic/Manual reset				
External Device Monitoring				
		L/T Muting		
		Double muting		
		Muting Enable		
		Muting timeout		
		Override		
COMPATIBILITY				
Single beam photocells	S5/SL5/S300			
Safety light curtains		All DATALOGIC SLC		
NOTES				
A. includes response time of photocells				
B. Functions setting is done through DIP switches in SG-BWS-T4-MT and through wiring in SG-BWS-T4				

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(727)345-47-04

Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: dob@nt-rt.ru || сайт: <https://datasensor.nt-rt.ru/>