Sintec Optronics

SLY Series Range-finding Modules

Laser rangefinders are used to measure the distance of the target by detecting the return signal of the emitting laser. These modules are compact and have stable performance. They can be used to detect static and dynamic targets, and can be used on a variety of platforms.

1. 3-15km Range-finding Modules (1535nm)

Features:

- Compact and lightweight
- Class I human eye safety standards
- Stable performance

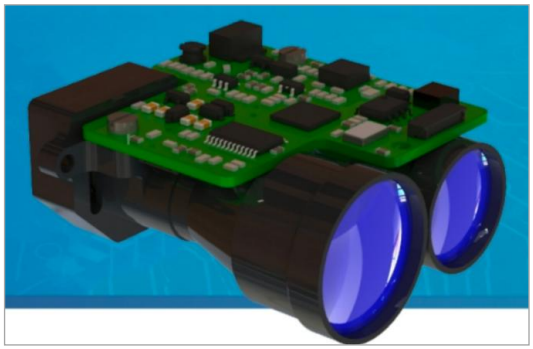
Part number	SLY-0310F-04	SLY-0516F	SLY-0621F	SLY-0825F	SLY-1040F	SLY-1552F
Wavelength	1535nm±5nm					
Ranging Capability (Vehicle, 2.3m x 2.3m)	≥3km	≥5km	≥6km	≥8km	≥10km	≥15km
Minimum range	≤15m	≤15m	≤20m	≤30m	≤50m	
Receiving Aperture		Φ16mm	Φ21mm	Φ25mm	Φ40mm	Φ52mm
Laser divergence angle	≤0.6mrad	≤0.3mrad				
Continuous ranging frequency	1-10Hz	1Hz-10Hz (adjustable)				
Ranging accuracy (RMS)	≤1m				≤1.5m	
Accurate ranging ratio	≥98%					
Range resolution	≤30m					

Voltage supply	DC 5-28V					
Weight	3 g ±1 g	≤40g	≤55g	≤72g	≤130g	≤190g
Average Power Consumption (at 1Hz Operation)	≤ 0.8W	≤1W@5V	≤1W@5V	≤1.3W@5V	≤1.5W@5V	≤2W@5V
Peak Power Consumption	≤3W	≤3W@5V	≤3W@5V	≤4W@5V	≤4.5W@5V	≤5W@5V
Dimension (mm)	≤48×21×31	≤50×23×33.5	≤65×40×28	≤65×46×32	≤83×61×48	≤104×61×74
Working temperature	-40°C~70°C	-40°C~60°C				
Storage temperature	-45°C~70°C	-55°C~70°C				
Communication interface	RS422 Serial Port or TTL	TTL,115200bp	RS422 Serial Port or TTL			
Shock	75g@6ms (Customizable 1000g/1ms)	>75g@6ms				

STDY Series Range-finding Modules

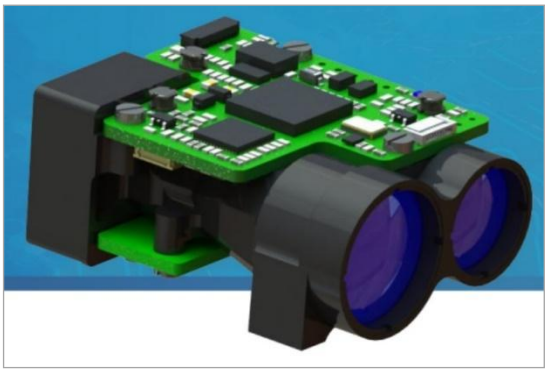
1. STDY-DA and STDY-YA Range-finding Modules

(1) STDY-DA1xxx



Model	STDY-DA1000	STDY-DA1500
Wavelength	905nm	
Range	20m~1000m	20m~1500m
Ranging accuracy	≤±2m	
Ranging frequency	1Hz	
Accurate rate	≥98%	
Acceptance aperture	17mm	
Connector	TTL	
Supply voltage	5V±0.5V	
Power consumption	≤2W	
Dimension	45mmx44mmx21mm	
Weight	≤35g	
Operating temperature	-40℃~+55℃	

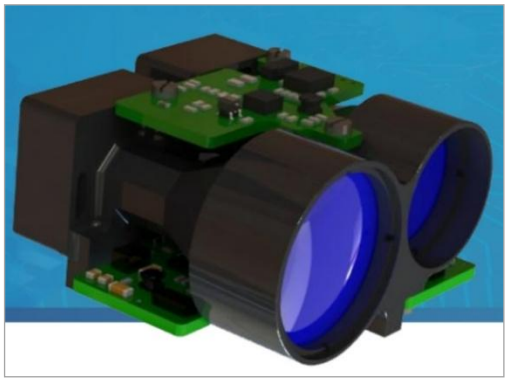
(2) STDY-DA2xxx series



Model	STDY-DA2000	STDY-DA2500
Wavelength	905nm	
Range	20m~2000m	30m~2500m
Ranging accuracy	≤±2m	

Ranging frequency	1Hz
Accurate rate	≥98%
Acceptance aperture	17mm
Connector	TTL
Supply voltage	5V±0.5V
Power consumption	≤2W
Dimension	50.5mmx37mmx22mm
Weight	≤45g
Operating temperature	-40℃~+55℃

(3) STDY-DA3xxx series



Model	STDY-DA3000	STDY-DA3500
Wavelength	905nm	
Range	20m~3000m	30m~3500m
Ranging accuracy	≤±2m	
Ranging frequency	1Hz	
Accurate rate	≥98%	
Acceptance aperture	24mm	
Connector	TTL	
Supply voltage	5V±0.5V	
Power consumption	≤2W	
Dimension	50mmx49.5mmx29mm	
Weight	≤65g	
Operating temperature	-40℃~+55℃	

2. STDY-DYC Range-finding Modules

(1) STDY-DYCx000

Model	STDY-DYC3000	STDY-DYC4000	STDY-DYC5000
Wavelength	1535nm	1535nm	1535nm
Range	15m~3000m	50m~4000m	50m~5000m
Ranging accuracy	≤±2m	≤±2m	≤±2m
Ranging frequency	≥1Hz	≥1Hz	≥1Hz
Accurate rate	≥98%	≥98%	≥98%
Divergence angle	≤0.65mrad	≤0.6mrad	≤0.7mrad
Acceptance aperture	18mm	21mm	25mm
Connector	TTL	RS422	RS422
Supply voltage	12V±2V	12V±2V	12V±2V
Power consumption	≤2W	≤3W	≤3W
Dimension	50mmx36mmx24mm	57mmx50mmx30mm	61mmx43mmx32mm
Weight	≤56g	≤75g	≤85g
Operating temperature	-40℃~+55℃	-40℃~+55℃	-40℃~+55℃

Model	STDY-DYC6000	STDY-DYC7000	STDY-DYC8000	STDY-DYC9000
Wavelength	1535nm	1535nm	1535nm	1535nm
Range	20m~6000m	20m~7000m	80m~8000m	80m~9000m
Ranging accuracy	≤±2m	≤±2m	≤±2m	≤±2m
Ranging frequency	≥1Hz	≥1Hz	≥1Hz	≥1Hz
Accurate rate	≥98%	≥98%	≥98%	≥98%
Divergence angle	≤0.3mrad	≤0.3mrad	≤0.5mrad	≤0.5mrad
Acceptance aperture	34mm	34mm	42mm	42mm
Connector	RS422	RS422	RS422	RS422
Supply voltage	7.5V±1.5V	7.5V±1.5V	12V±2V	12V±2V
Power consumption	≤2W	≤2W	≤3W	≤3W
Dimension	80x59x45mm	80x59x45mm	86x66x45mm	86x66x45mm
Weight	≤120g	≤120g	≤145g	≤145g
Operating temperature	-40℃~+55℃	-40℃~+55℃	-40℃~+55℃	-40℃~+55℃

(2) STDY-DYCx000A

Model	STDY-DYC6000A	STDY-DYC7000A
Wavelength	1535nm	
Range	20m～6000m	20m～7000m
Ranging accuracy	≤±2m	
Ranging frequency	1Hz	
Accurate rate	≥98%	
Divergence angle	≤0.3mrad	
Acceptance aperture	34mm	
Connector	TTL	
Supply voltage	7.5V±1.5V	
Power consumption	≤2W	
Dimension	81mmx57.5mmx41.5mm	
Weight	≤125g	
Operating temperature	-40℃~+55℃	

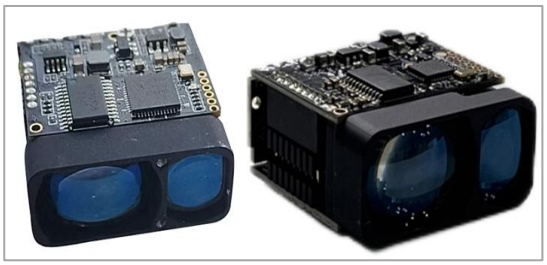
(3) STDY-DYC6000B

Model	STDY-DYC6000B
Wavelength	1535nm
Range	50m~6000m
Ranging accuracy	≤±2m
Ranging frequency	1Hz
Accurate rate	≥98%
Divergence angle	≤0.7mrad
Acceptance aperture	34mm
Connector	RS422
Supply voltage	28V±6V
Power consumption	≤3W
Dimension	87mmx52mmx41mm
Weight	≤195g
Operating temperature	-40℃~+55℃

(4) STDY-DYC100X and STDY-DYC100XA

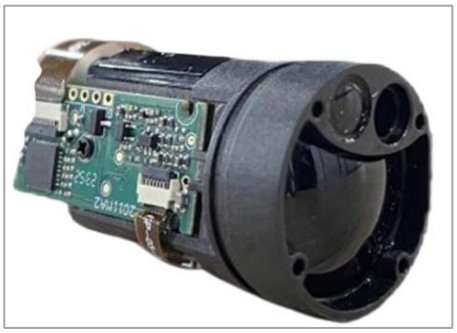
Model	STDY-DYC100X	STDY-DYC100XA
Wavelength	1535nm	
Range	50m～10000m	80m～10000m
Ranging accuracy	≤±2m	
Ranging frequency	1Hz	
Accurate rate	≥98%	
Divergence angle	≤0.5mrad	
Acceptance aperture	48mm	
Connector	RS422	
Supply voltage	28V±6V	
Power consumption	≤4W	
Dimension	107mmx84mmx56mm	
Weight	≤230g	≤290g
Operating temperature	-40℃~+55℃	

STTM Series Range-finding Modules



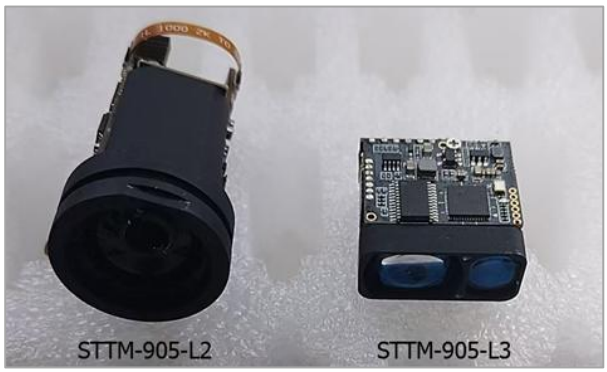
Specifications

Model	**STTM-905-L3**
Laser Wavelength	905nm
Detection Distance	5~1300m@70%
Maximum Measurement Time	~0.6s
Accuracy	±1m
Blind Area	5m
Resolution Ratio	0.1m
Voltage	Typical (DC, +3.3V) Voltage Range (+3.3V~+5V)
Current	210mA
Power Consumption	690mW@3.3V
Working Temperature	-20~50℃
UART	115200bps
Serial Port Level	TTL3.3V
Dimension	25.72mm*24.6mm*13.4mm
Weight	~10g



Specifications

Model	**STTM-905-L2**
Laser Wavelength	905nm
Detection Distance	3~700m@70%
Maximum Measurement Time	~1s
Accuracy	±1m
Blind Area	3m
Resolution Ratio	0.1m
Voltage	Typical (DC, +3.3V) Voltage Range (+3.3V~+5V)
Current	100mA
Power Consumption	330mW@3.3V
Working Temperature	-20~50℃
UART	115200bps
Serial Port Level	TTL3.3V
Dimension	43*φ25mm
Weight	~30g


STTM-905-L2
STTM-905-L3


STTM-905-L3
STTM-905-L2