

BUSNET SYSTEM

PHOTOELECTRIC BEAM SENSOR (Twin beam)

BUS-20XT (Outdoor 20m) BUS-60XT (Outdoor 60m)

BUS-40XT (Outdoor 40m)



Newly developed BUSNET SYSTEM Twin Beam for short protection distance and narrow installation site!

Saving wirings

Only 2 signal wirings from each sensor can connect in parallel to the control panel which saves wiring time and cost.

Double modulation

Double modulated beams are designed to distinguish the external lights. It increases the reliability in the outdoor security system against sunshine, headlight of the car.

Twin high power beam

The sensitivity margin is 100 times of the minimum requirement. The beam distance is 10 times of the described specification. This high power beam also realizes the reliability against the harsh conditions like fog, snow, heavy rain.

Low current consumption

Current consumption significantly reduced than old models. The size of power supply unit may reduce, wiring diameter may lessen, installation cost may decrease.

Ecology

RoHS adapted - Environment friendly. Free from Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyl, Polybrominated diphenyl ether, Bis phthalate, Butyl bezyl phthalate, Dibutyl phthalate, Diisobutyl pthalate.

Insect(Ant)/Water prevent

Anti-insect bushing and special gasket enable IP55 rated tight housing. Anti-insect bushing fits wiring hole size just by cutting it which protects base boards from insects and water invasion.

Dual ring sight

Enables better and clear view for easy beam alignment.

Target color

The vivid color of the internal structure can be recognized easily from the far end in the beam alignment procedure. The color differs between a transmitter and a receiver which helps easy installation and checking.

2 steps sound alignment checker

2 different sounds - Intermittent and continuous sounds - enable to understand the alignment level without a tester.

Increased angle adjustment allowance

Horizontally $\pm 95^\circ$ adjustable. Also the sensor angle can be locked so that it will not change due to vibration.

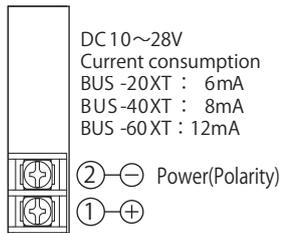
Strengthened lightning protection

Minimize the damage by the induced lightning through wirings.

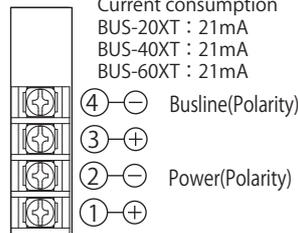
Photoelectric Twin Beam Sensor (BUSNET SYSTEM)

Wiring method

(Transmitter)

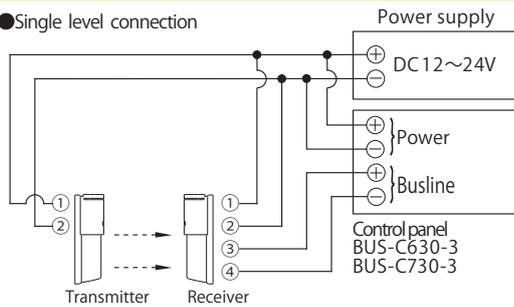


(Receiver)

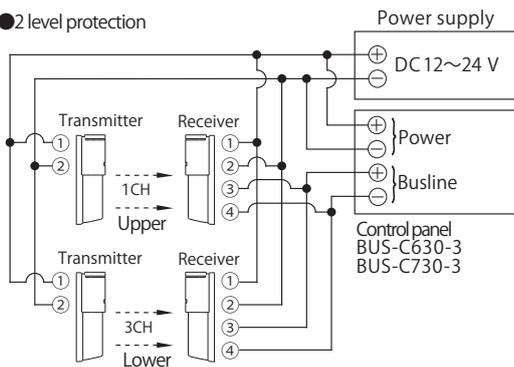


Wiring diagram

Single level connection

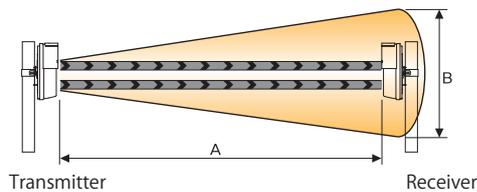


2 level protection



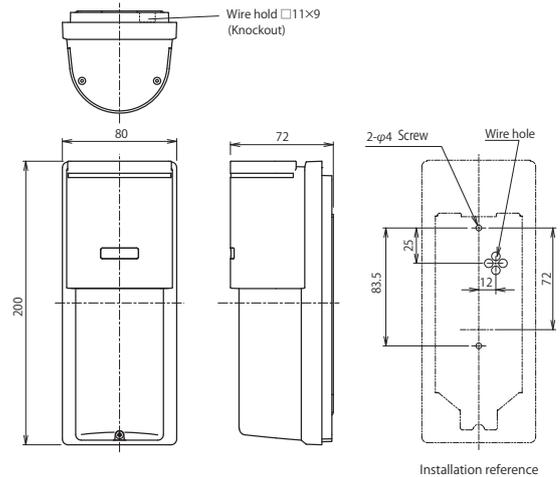
Protection distance and range of beam coverage

Correct alignment allows sufficient



Model	A: Distance	B: Beam expansion
BUS-20XT	20m or less	0.6m
BUS-40XT	40m or less	1.2m
BUS-60XT	60m or less	1.8m

External dimensions (mm)



Specifications

Model	BUSNET Beam sensor		
	BUS-20XT	BUS-40XT	BUS-60XT
Detection system	Near infrared pulsed beam interruption system (Double modulation)		
Protection distance	Outdoor 20m or less (Indoor 40m or less)	Outdoor 40m or less (Indoor 80m or less)	Outdoor 60m or less (Indoor 120m or less)
Maximum distance	Outdoor 200m Indoor 200m	Outdoor 400m Indoor 400m	Outdoor 600m Indoor 600m
Response time	0.05sec. 0.1sec. 0.25sec. 0.7sec. (4 steps)		
Power supply	DC10~28V (Polarity)		
Current consumption	20mA or less (At protection) 27mA or less (Max.)	22mA or less (At protection) 29mA or less (Max.)	26mA or less (At protection) 33mA or less (Max.)
Transmission way	BUSNET (Time-division multiplex transmission)		
Transmission signal	Alarm signal Tamper signal (Receiver only) Low voltage signal		
Transmission LED	Standby : Red on (In case cover opened), Off (in case cover closed)		
Alarm/Attenuation LED	Beam interruption : Light on Red Sensitivity attenuated : Blink Red		
Memory/Function check LED	Auto reset : Blink Red Manual reset : Light on Red *Only when the control panel is in Operation mode Light on Red when alarm is issued *Only when the control panel is in CHECK MODE		
Functions	Modulated frequency changeover, Sound check, Lower beam prohibition, Alarm memory, Monitor jack, Tamper, Response time adjustment, Sensitivity attenuation LED		
Beam adjustment	Horizontal : ±95° Vertical : ±10°		
Ambient temperature	-25°C ~ +60°C		
Mounting position	Outdoor, indoor (Rain-proof IP 55)		
Wiring	Terminals		
Weight	Transmitter : 370g		Receiver : 400g
Appearance	PC Resin (Wine red)		

Optionals (Sold separately)



Limited Warranty : TAKEX products are warranted to be free from defects in material and workmanship for 12 months from original date of shipment. Our warranty does not cover damage or failure caused by natural disasters, abuse, misuse, abnormal usage, faulty installation, improper maintenance or any repairs other than those provided by TAKEX. All implied warranties with respect to TAKEX, including implied warranties for merchantability and implied warranties for fitness, are limited in duration to 12 months from original date of shipment. During the Warranty Period, TAKEX will repair or replace, at its sole option, free of charge, any defective parts returned prepaid. Please provide the model number of the products, original date of shipment and nature of difficulty being experienced. There will be charges rendered for product repairs made after our Warranty Period has expired.

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