

Compact Laser

V500 Barcode Reader

- Compact design
- Easy installation & setup
- Strong reading performance



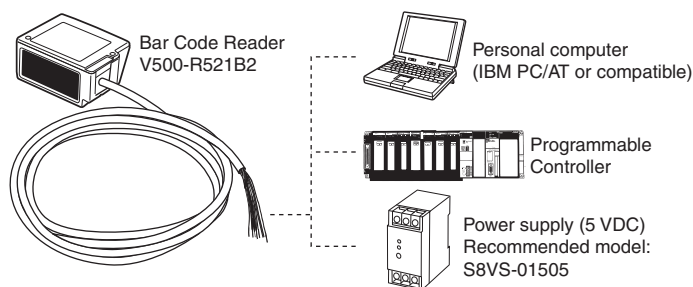
Ordering information

	Product	Model
Bar Code Readers	Cable output	V500-R521B2
	Round DIN connector	V500-R521C2
ID Link Unit (sold separately)		V700-L12
Cables (sold separately)	SYSMAC D-sub 9-pin cable, 0.8 m	V509-W011
	SYSMAC D-sub 9-pin cable, 5 m	V509-W016
	IBM PC/AT or compatible D-sub 9-pin cable, 0.8 m	V509-W011D
	IBM PC/AT or compatible D-sub 9-pin cable, 5 m	V509-W016D

System Configuration

V500-R521B2 (Cable Output)

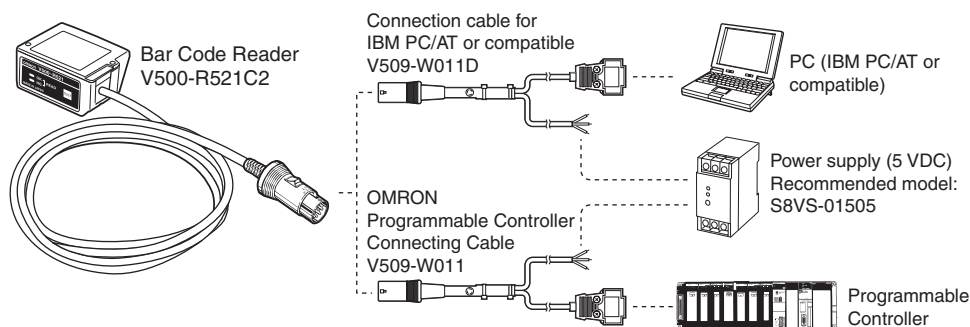
The cable end has loose wires.



V500-R521C2 (Connector Output)

The cable end has a connector.

Prepare a connecting cable suitable for the host.



Ratings and Performance

General Specifications

Applicable bar codes	Type of bar code	Code 39, NW-7, ITF, STF (2 of 5 bars), Code 93, Code 128 (including EAN128), EAN/UPC (A and E)
	Number of read digits	32 digits max. (depends on bar width and read size)
Reading performance ^{*1}	Resolution	0.15 mm (for PCS0.9)
	Contrast (PCS value)	0.45 min. (70% white reflectance min.)
	Reading distance	60 to 270 mm (with 1.0-mm thin bar)
	Reading angle	Within 40° (including left and right margins)
	Skew angle	±50° (excluding the upper 10° and lower 5° ranges)
	Pitch angle	±25° (25° right and left)
	Light source	Red laser diode (wavelength: 650 nm)
	Optical output	1.0 mW max.
	Scan type	Raster scan
	Number of scans	500 scans/s
Interfaces	Number of read repetitions	2 to 6 times
	Reading verification	Buzzer and LED indicators
Function setting method	Communications specifications	RS-232C
	OK/NG output (V500-R521B2 only)	30 mA at 24 VDC, NPN open-collector output
Read trigger	Menu sheet reading or host commands	
Read results output	· External trigger (transistor input) · Trigger by command (RS-232C) · Test read trigger with the TEST Button on the Reader	
	RS-232C output	Read data is output.
	OK/NG signal (V500-R521B2 only)	The OK signal turns ON when reading is successful. The NG signal turns ON when reading fails.
	LED indicators	The OK indicator lights when reading is successful. The NG indicator lights when reading fails.
Power supply specifications	Buzzer	The buzzer sounds when reading is successful. (The buzzer can be muted.)
	Power supply voltage	5 VDC ±10% ^{*2}
	Current consumption	220 mA typ. (330 mA max.)
Environment	Inrush current	2.5 A max.
	Ambient temperature	Operating: 0 to 45°C, Storage: -10°C to 60°C (with no icing or condensation)
	Ambient humidity	Operating and storage: 30% to 85% (with no icing or condensation)
	Vibration resistance	12 to 100 Hz, 19.6 m/s ² acceleration in X, Y, and Z directions for 3 hours each
Enclosure rating	Allowable ambient light	3,000 lx max. (fluorescent light; excluding inverter fluorescent lighting)
	IP54 (IEC 60529 standard)	
Weight	80 g (excluding cable and connector)	
I/O connector	V500-R521B2: Cable output	
	V500-R521C2: DIN 8-pin connector	
Cable length	2 m	

^{*1} Unless otherwise specified, specifications are for a bar code set to JAN 1' with an MRD of 63% or higher (a PCS value of 0.9 or higher) is used with the pitch angle (a) set to 0°, the skew angle (b) set to 15°, the tilt angle (g) set to 0°, and the curvature (R) set to infinity.

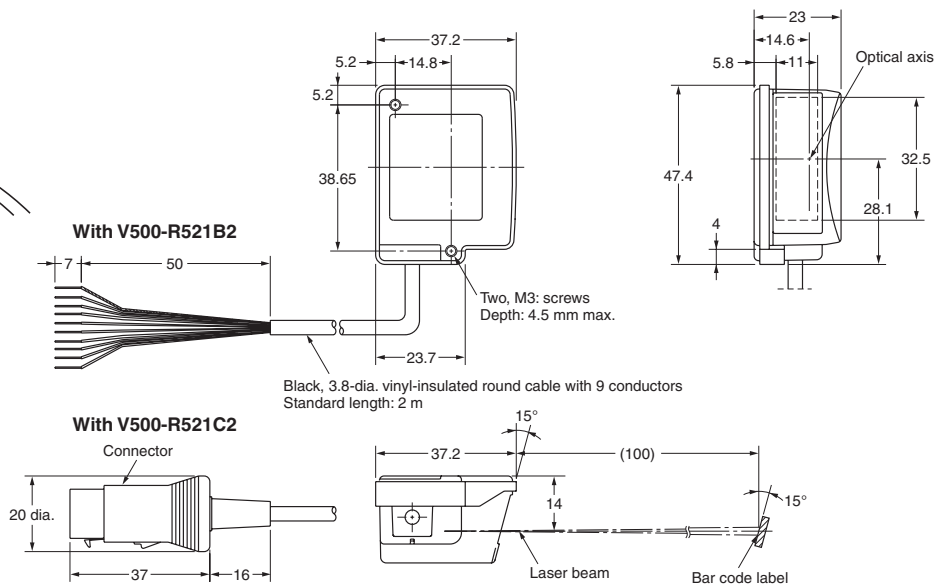
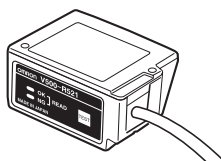
^{*2} The power supply voltage is specified at the I/O connector of the Bar Code Reader

Dimensions

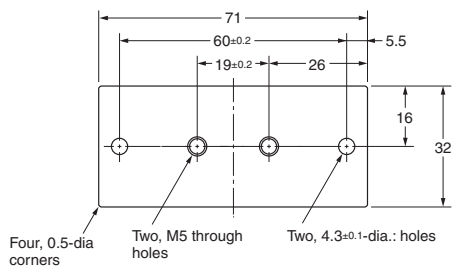
Bar Code Reader

V500-R521B2

V500-R521C2Q23E-EN-01

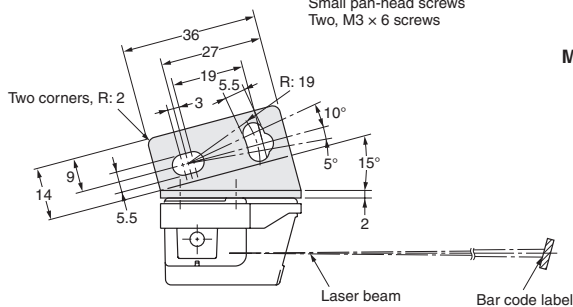
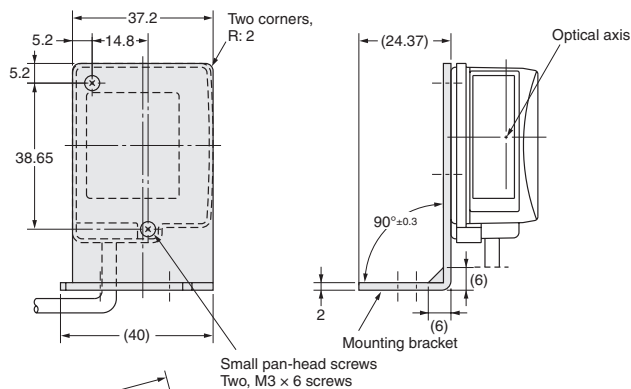


Supplied Insulation Plate

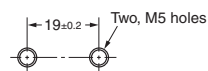


Note: The insulation plate has a thickness of 8 mm.

Mounting Bracket Attached



Mounting hole dimensions



ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.