CC-Link IE



CC-Link IE is an open 1Gbit Industrial Ethernet automation network consisting of ; CC-Link IE Control, CC-Link IE Field. CC-Link IE Control communicates over dual-loop fiber between PLCs, HMIs, and PCs with an extremely large cyclical data-sharing capacity. CC-Link IE Field has a smaller cyclical data-sharing capacity, but communicates with both PLCs and Remote I/O stations over shielded Cat5e cables with standard RJ45 connectors in a star, line, or combination topology. CC Link IE Field Basic realizes easier network integration, as its cyclic communications stack is software-based, without requiring a dedicated hardware and also utilizes RJ45 connectors. It is used for small-scale systems.

CC-Link IE Products

Product		Model Number	Description	Stocked Item
CC-Link IE Field/ Control/Basic	CPU	R04ENCPU, R08ENCPU, R16ENCPU, R32ENCPU, R120ENCPU	CPU	S
CC-Link IE Control		RJ71GP21-SX	Interface for iQ-R Platform (R CPU)	S
	Master/Slave	RJ71GP21S-SX	Interface for iQ-R Platform (R CPU), with redundant power	S
		QJ71GP21-SX	Interface for iQ Platform (QnU CPU)	S
		QJ71GP21S-SX	Interface for iQ Platform (QnU CPU), with redundant power	-
		Q80BD-J71GP21-SX	PCI interface card	-
		Q80BD-J71GP21S-SX	PCI interface card, with redundant power	-
	CC-Link IE Control Interface	GT15-J71GP23-SX	Interface for GOT1000 HMI (GT16/GT15)	S
	Fiber Optic Cordset (Cable with Connectors) QGM-B-LL		Pre-made cordset = 1m, 2m, 3m, 5m, 10m, 15m, 20m, 25m, 30m, 35m, 40m, 50m length	S

CC-Link IE Control Modules

Sincked Imm S <t< th=""><th colspan="2">Model Number</th><th></th><th>RJ71GP21-SX</th><th>RJ71GP21S-SX</th><th>RJ71EN71 (When Configured as CC-Link IE Control)</th></t<>	Model Number			RJ71GP21-SX	RJ71GP21S-SX	RJ71EN71 (When Configured as CC-Link IE Control)		
Carcinization UL + clii Constraint of Cons	Stocked Iten	n		S	S	S		
Number of Occupied I/O Points 32 46 points 2 alots (//O assignment: ennyly ta points : internal Carrent Consumption (A) 0.83 0.95 0.82 External Power Supply Current Applicable Monital Serve Xize Applicable Size Xize Applicable Size Applicable Size App	Certification					l		
Internal Consumption (A) Perform Ternal Power Supply Perform Power	Number of Occupied I/O Points		oints	32	48 points 2 slots (I/O assignment: empty 16 points + intelligent 32 points)	32		
Voltage Terminal Sterw Size Applied Voltage Terminal Sterw Size Applied Voltage Size Applied Voltage Applied Voltage Applint (Applied Voltage Applied	Internal Cur	rent Consump	tion (A)	0.88	0.95	0.82		
Current Applicable Selectives Applicable Selective Applicable Se		Voltage		-	20.4 to 31.2 VDC			
Image: Section 2 Subject: S		Current		-	0.28A			
Applicable Subservice Provide Size Transmission Subservice Provide Size Transmission Subservice Size Transmission Size Size Transmission Size Size Transmission Size Size Transmission Size Size Size Size Transmission Size Size Size Transmission Size Size Size Transmission Size Size Size Size Size Size Size Size		Terminal Screw Size		No external power supply function	M3 screw			
Prover Supply Provide Provide Provide Prover supply function Prover	External	Applicable Solderless Terminal			R1.25-3			
Supply Prover Failure Time Total Failure Time Description Description Noise Immunity Prover Failure Time B 32K points (32768 points, 4K bytes)	Power	Applicable Wire Size			0.3 to 1.25mm (22 to 16 AWG)	No external power supply function		
Allowable Momentary Noise Innur. Ims (avalle PS1) Noise Innur. Simulator noise S00Vp.noise width 1µs, nooke requency 25 to 60H₂ (noise simulator noise s00Vp.noise width 1µs, nooke requency 25 to 60H₂ (noise simulator noise s00Vp.noise width 1µs, nooke requency 25 to 60H₂ (noise simulator nooke 10H² (noise 1	Supply	Tightening Torque			0.42 to 0.58 N•m			
Noise Immunity Simulator noise SOUVp-p. noise width 1µs. noise frequency 25 to 60Hz (noise simulator condition) Maximum Number of Link Points Per Natio LW 32K points (32768 points, 4K bytes) >>>>>>>>>>>>>>>>>>>>>>>>>>>>		Allowable Momentary Power Failure Time			1ms (level PS1)			
Bit 28X points (32768 points. 4K bytes) View Points Per Network View 28X points (8192 points, 1K bytes) LY 6K points (16324 points, 256K bytes).		Noise Immunity			Simulator noise 500Vp-p, noise width 1µs, noise frequency 25 to 60Hz (noise simulator condition)			
Maximum Number of Link Points Per Network UW 128k points (131072 points, 256k bytes) Link Points Per Network BK points (16120 points, 11k bytes) Maximum Number of Link Points Per Station LB 16K points (1634 points, 25K bytes), extended mode: 32K points (13072 points, 256k bytes) Maximum Number of Link Points Per Station LB 16K points (1634 points, 25K bytes), extended mode: 128K points (131072 points, 256k bytes) Transient Transmission Capacity 1820 bytes maximum 1820 bytes maximum Communication Speed 180 points (18102 points, 1K bytes) Line topology, star topology (coexistence of line topology, star topology (coexistence of line topology, star topology (coexistence of line topology, star topology, 1000ASE-TF standard. Calegory 5 en tiphe, straight calegory 5 en (bytes, straight) Retwork Topology Optical fiber cable which satisfies 1000BASE-SX standard: Multi-mode optical fiber (Si) 100m (contorns to ANSI/TIVEIA-568-B (Category 5 en)) Retwork Topology S50m (when the outside diameter of the core is 62.5 µm) 550m 100m (contorns to ANSI/TIVEIA-568-B (Category 5 en)) Maximum Mustation-To-Station Distance 66000m (when 120 stations are connected) and the outside diameter of the core is 62.5 µm) 550m 100m (contorns to ANSI/TIVEIA-568-B (Category 5 en)) Maximum Muster of Cameetine Sations 20 elevels maximum 100m (when 120 stati			LB	32K points (32768 points, 4K bytes)				
Link Points Per Network [V] IX BX points (B192 points, 1K bytes) Maximum Number of Link Points Per Station Link Points Per Station LB 16K points (B342 points, 2K bytes), extended mode: 32K points (131072 points, 256K bytes) Maximum Number of Link Points Per Station LW 16K points (B342 points, 32K bytes), extended mode: 128K points (131072 points, 256K bytes) Transient Transmission Capacity 1920 bytes maximum Extended mode: 128K points (131072 points, 256K bytes) Communication Syeed 1920 bytes maximum Extended mode: 128K points (131072 points, 256K bytes) Network Topology Uplex loop Inite topology, star topology (coexistence of line topology, and star topology (coexistence of line topology and star topology (coexistence of line topology. 1900BASE-TS standard: Category 5e or higher, straight catele (double shielded, STP) Maximum Station-To-Station Distance 550m (when the outside diameter of the core is 62.5µm) 550m 100m (conforms to ANSI/TIA/EIA-568-B (Category 5e)) Overall Cable Distance - 20 levels maximum 20 levels maximum Maximum Number of Connections is 62.5µm) - 20 levels maximum 20 levels maximum Maximum Number of Connectible Stations 20 stations (control s	Maximum N	umber of	LW	128K points (131072 points, 256K bytes)				
VT ØK points (6192 points, 1K bytes) Maximum Number of Link Points Per Station EB 16K points (16384 points, 2K bytes), extended mode: 32K points (131072 points, 256K bytes) Transient Transmission Capacity 1920 bytes maximum Communication Speed 1920 bytes maximum Communication Cable Optical fiber cable which satisfies 10008ASE-X standard: Multi-mode optical fiber (Gi) Line topology star topology (coexistence of line topology star topology (coexistence of line topology as points, 14K bytes) Communication Cable Optical fiber cable which satisfies 10008ASE-X standard: Multi-mode optical fiber (Gi) Line topology as that topology is also possible), and ring topology Raximum Station-To-Stature S50m (when the outside diameter of the core of the core is 62.5µm) S50m 1000 (contorms to ANS/ITA/ELA-686-B (Category 5e)) Overall Cable Distance C6000m (when 120 stations are connected and the outside diameter of the core is 62.5µm) 550m 100m (contorms to ANS/ITA/ELA-686-B (Category 5e)) Number of Casede Connections - 20	Link Points	Per Network	LX	8K points (8192 points, 1K bytes)				
LB 16K points (16334 points, 2K byles), extended mode: 32K points (32769 points, 4K byles) Maximum Number of Connections W 06K points (1634 points, 32K byles), extended mode: 128K points (131072 points, 256K bytes) Tansient Transmission Capacity Points, 1K bytes) Extended mode: 128K points (131072 points, 256K bytes) Tansient Transmission Capacity Points, 1K bytes) Extended mode: 128K points (131072 points, 256K bytes) Communication Speed 16bps Extended mode: 128K points (131072 points, 256K bytes) Retwork Topology Stop bytes maximum Extended mode: 32K points (181072 points, 256K bytes) Retwork Topology Topology Stop bytes maximum Extended mode: 128K points (16180 Control to the points (16180 Control to the points) Extended mode: 128K points (181072 points, 256K bytes) Retwork Topology Topology Topology points, 1K bytes) Extended mode: 128K points (181072 points, 256K bytes) Extended mode: 128K points (181072 points, 256K bytes) Retwork Topology Topology Optical fiber cable which satisfies 1000BASE-SX standard: Multi-mode optical fiber (si) Extended mode: 228K points (181072 points, 256K bytes) Retwork Topology Optical fiber cable which satisfies 1000BASE-SX standard: Multi-mode optical fiber (si) Standard: Category 56 or 100BASE-ST standard: Category 56 or 100BASE-ST s			LY	8K points (8192 points, 1K bytes)				
Maximum Number of Link Points (Fi334 points, 132 ktytes), extended mode: 128k points (131072 points, 256k bytes) Image: Capacity 1500 points (1534 points, 15 ktytes), extended mode: 128k points (131072 points, 256k bytes) Transient Transmission Capacity 1320 bytes maximum Image: Capacity 1320 bytes maximum Communication Sole 16 bps Image: Capacity (capacitance of the pology and star topology (capacitance of the pology) Ethernet cable which satisfies 1000BASE-T Maximum Station-To-Station Distance 550m (when the outside diameter of the core is 50µm) 275m (when the outside diameter of the core is 62.9µm) 550m (when the outside diameter of the core is 62.9µm) 100m (conform to ANS/ITIA/EIA-S68-B (Category Sei)) 100m (conform to ANS/ITIA/EIA-S68-B (Category Sei)) 100m (conform to ANS/ITIA/EIA-S68-B (Category Sei)) 100m (conform to ANS/ITIA/EIA-S68-B (Category			LB	16K points (16384 points, 2K bytes), extended mode: 32K points (32768 points, 4K bytes)				
Link Points Per Station LY K points (8192 points, 1K bytes) Transient Transmission Capacity 1920 bytes maximum Communication Speed 10bps Network Topology Duplex loop Diplex loop Diplex loop Communication Cable Optical fiber cable which satisfies 1000BASE-SX standard: Multi-mode optical fiber (GI) Maximum Station-To-Station Distance 550m (when the outside diameter of the core is 62.5µm) Stoom (when 120 stations are connected) and the outside diameter of the core is 62.5µm) 550m Maximum Station-To-Station Distance 66000m (when 120 stations are connected) and the outside diameter of the core is 62.5µm) Metwork Topology 66000m (when 120 stations are connected) Number of Cascade Connections - 20 levels maximum 120 stations (Story 3-2-10 Types A1a.1 Token ring - Optical Fiber Specifications Standard: IEEE802.3, IEC 60739-2-10 Types A1a.1 Token ring Communication Method Token ring - - Optical Fiber Specifications Standard: IEEE802.3, IEC 60739	Maximum N	umber of	LW	16K points (16384 points, 32K bytes), extended mode: 128K points (131072 points, 256K bytes)				
LY BK points (182 points, 1K bytes) Transient Tra	Link Points	Per Station	LX	8K points (8192 points, 1K bytes)				
Transmission Capacity 1920 bytes maximum Communication Speed 16bps Network Topology Duplex loop Duplex loop Line topology, star topology (coexistence of line topology, star topology (coexistence of line topology, star topology) Communication Cable Optical fiber cable which satisfies 1000BASE-SX standard: Multi-mode optical fiber (GI) Ethernet cable which satisfies 1000BASE-T standard: Category 5e on higher, straight cable (double shielded, STP) Maximum Station-To-Station Distance 550m (when the outside diameter of the core is 50µm) 275m (when the outside diameter of the core is 50µm) 3200m (when 120 stations are connected) at the outside diameter of the core is 50µm) 3000m (when 120 stations are connected) star topology. 11900m (when 120 stations are connected) star topology. 11900m (when 120 stations are connected) star topology. 1200m (when 120 stations are connected). Star topology. 1200m (when 120 stations are connected). Star topology. 12000m (when 120 stations are connected). St			LY	8K points (8192 points, 1K bytes)				
Communication Speed 16bps Network Topology Duplex loop Line topology, star topology (oexistence of line topology, star topology is also possible), and ring topology Communication Cable Optical fiber cable which satisfies 1000BASE-SX standard: Multi-mode optical fiber (GI) Ethermet cable which satisfies 1000BASE-T standard: Category 5e or higher, straight cable (double shielded, STP) Maximum Station-To-Station Distance 550m (when the outside diameter of the core is 50µm) 275m (when the outside diameter of the core is 50µm) 270m (when 120 stations are connected and the outside diameter of the core is 62.9µm) 100m (conforms to ANSI/TIA/EIA-568-B (Category 5e)) Overall Cable Distance 66000m (when 120 stations are connected and the outside diameter of the core is 62.5µm) 66000m (when 120 stations are connected) and the outside diameter of the core is 62.5µm) 100m (when 120 stations are connected) Star topology. 12000m (when 120 stations are connected) Star topology. 12000m (when 120 stations are connected) Maximum Number of Cancentible Stations (control station: 1, normal station: 119) (*1) 20 levels maximum Maximum Number of Roups 22 Communication Method Token passing Optical Fiber Specifications Duplex LC connector: Standard: IEC 60793-2-10 Types A1a.1 Token passing Optical Fiber Specifications Duplex LC connector: Standard: IEC 60793-2-10 Types A1a.1 Token passing Optical	Transient Transmission Capacity		apacity	1920 bytes maximum				
Network Topology Duplex loop Line topology, star topology (coexistence of line topology, star topology is also possi- ble), and ring topology Communication Cable Optical fiber cable which satisfies 1000BASE-SX standard: Multi-mode optical fiber (GI) Ethernet cable which satisfies 1000BASE-T standard: Category 5e or higher, straight cable (double shielded, STP) Maximum Station-To-Station Distance 550m (when the outside diameter of the core of the core is 62.5µm) 550m 100m (conforms to ANSI/TIXEIA-568-B (Category 5e)) Overall Cable Distance 550m (volten the outside diameter of the core is 62.5µm) 66000m (when 120 stations are connected) and the outside diameter of the core is 62.5µm) Line topology. 11900m (when 120 stations are connected) Stations Number of Cannectible Stations	Communicat	tion Speed		Gbps				
Communication CableOptical fiber cable which satisfies 1000BASE-X standard: Multi-mode optical fiber (Gi)Ethernet cable which satisfies 1000BASE-T standard: Category 5e or higher, straight cable (double shielded, STP)Maximum Station-To-Station Distance550m (when the outside diameter of the core is 62.5µm)550m100m (conforms to ANSI/TIA/EIA-568-B (Category 5e))Overall Cable Distance66000m (when 120 stations are connected and the outside diameter of the core is 62.5µm)66000m (when 120 stations are connected) star topology: 11900m (when 120 stations are connected) Star topology: 1200m (when 120 stations are connected)Line topology: 11900m (when 120 stations are connected) Star topology: Depends on the system connected and the outside diameter of the core is 62.5µm66000m (when 120 stations are connected)Line topology: 1200m (when 120 stations are connected) Star topology: Depends on the system connected and the outside diameter of the core is 62.5µm200em (when 120 stations are connected)Star topology: Depends on the system connected and the outside diameter of the core is 62.5µmNumber of Cascade Connections-20 stations (control station: 1, normal station: 119) (*1)-Number of Connectible Stations32Optical Fiber SpecificationsStandard: IEEE802.3, IEC 60793-2-10 Types A1a.1 Outside diameter of the core/clad: 50µm, 62.5µm/125µm Transmission band: 500MH2×km or higher (\z-850m)RJ45 connectorOptical Fiber SpecificationsDuplex LC connector: Standard: IEC 61754-20 Type LC connector; Connection loss: 0.3dB R/M or lower (\z-850m)RJ45 connectorConnector SpecificationsDuplex LC connector: Standard: IEC 61754-20 Type LC connector; Connection loss: 0.3dB R/M or lower (\z-850	Network Topology			Duplex loop		Line topology, star topology (coexistence of line topology and star topology is also possi- ble), and ring topology		
Maximum Station-To-Station Distance550m (when the outside diameter of the core is 52.5µm)550m100m (conforms to ANSI/TIA/EIA-568-B (Category 5e))Overall Cable Distance66000m (when 120 stations are connected and the outside diameter of the core is 52.5µm)560m100m (conforms to ANSI/TIA/EIA-568-B (Category 5e))Overall Cable Distance66000m (when 120 stations are connected and the outside diameter of the core is 52.5µm)100m (conforms to ANSI/TIA/EIA-568-B (Category 5e))Number of Cascade Connections	Communication Cable			Optical fiber cable which satisfies 1000BASE-SX standard: Multi-mode optical fiber (GI)		Ethernet cable which satisfies 1000BASE-T standard: Category 5e or higher, straight cable (double shielded, STP)		
Overall Cable Distance66000m (when 120 stations are connected and the outside diameter of the core is 50µm) 33000m (when 120 stations are con- nected and the outside diameter of the core is 62.5µm)66000m (when 120 stations are connected)Line topology: 11900m (when 120 stations are connected)Number of Cascade Connections-20 levels maximumNumber of Cascade Connectible Stations120 stations (control station: 1, normal station: 119) (*1)20 levels maximumMaximum Number of Networks23923Maximum Number of Groups3254 not passingCommunication MethodToken ringToken passingOptical Fiber SpecificationsStandard: IEEE802.3, IEC 60793-2-10 Types Al.1 Outside diameter of the core/clad: 50µm, 62.5µm/125µm Transmission bas: 3.0dB/km or lower [A850nm] Transmission bas: 3.0dB/km or lower [A850nm] Transmission bas: 3.0dB/km or lower [A850nm] Transmission bas: 5.0dB/km or lower [A8	Maximum Station-To-Station Distance		ion Distance	550m (when the outside diameter of the core is 50 μ m) 275m (when the outside diameter of the core is 62.5 μ m)	550m	100m (conforms to ANSI/TIA/EIA-568-B (Category 5e))		
Number of Cascade Connections - 20 levels maximum Maximum Number of Connectible Stations 120 stations (control station: 1, normal station: 119) (*1) - Maximum Number of Networks 239 - - Maximum Number of Groups 32 - - Communication Method Token ring Token passing - Optical Fiber Specifications Standard: IEEE802.3, IEC 60793-2-10 Types ATa.1 Outside diameter of the core/clad: 50µm, 62.5µm/125µm Transmission loss: 3.0dB/km or lower [A850m] Token passing Connector Specifications Duplex LC connector: Standard: IEC 61754-20 Type LC connector; Connection loss: 0.3dB or lower; Polished surface: PC (Physical Contact) polishing RJ45 connector Laser Class (IEC60825-1) Class 1 laser product - Dimensions (H x W x D) mm (Base Mounting Side 98mm) 106 x 27.8 x 110 106 x 27.8 x 110 Weight (kg) 0.18 0.26 0.17	Overall Cable Distance			66000m (when 120 stations are connected and the outside diameter of the core is 50µm) 33000m (when 120 stations are con- nected and the outside diameter of the core is 62.5µm)	66000m (when 120 stations are connected)	Line topology: 11900m (when 120 stations are connected) Star topology: Depends on the system con- figuration Ring topology: 12000m (when 120 stations are connected)		
Maximum Number of Connectible Stations 120 stations (control station: 1, normal station: 119) (*1) Maximum Number of Networks 239 Maximum Number of Groups 32 Communication Method Token ring Token passing Optical Fiber Specifications Standard: IEEE802.3, IEC 60793-2-10 Types A1a.1 Outside diameter of the core/clad: 50µm, 62.5µm/125µm Transmission loss: 3.0dB/km or lower [A.850nm] Transmission band: 500MHz•km or higher (A=850nm) Token passing Connector Specifications Duplex LC connector: Standard: IEC 61754-20 Type LC connector; Connection loss: 0.3dB or lower; Polished surface: PC (Physical Contact) polishing RJ45 connector Laser Class (IEC60825-1) Class 1 laser product - - Dimensions (H x W x D) mm (Base Mounting Side 98mm) 106 x 27.8 x 110 106 x 56 x 110 106 x 27.8 x 110 Weight (kg) 0.18 0.26 0.17	Number of Cascade Connections		ections	- 20 levels maximum				
Maximum Number of Networks 239 Maximum Number of Groups 32 Communication Method Token ring Token passing Optical Fiber Specifications Standard: IEEE802.3, IEC 60793-2-10 Types A1a.1 Outside diameter of the core/clad: S0µm, 62.5µm/125µm Transmission loss: 3.0dB/km or lower [λ850nm] Transmission loss: 3.0dB/km or lower [λ850nm] - Connector Specifications Duplex LC connector: Standard: IEC 61754-20 Type LC connector; Connection loss: 0.3dB or lower; Polished surface: PC (Physical Contact) polishing RJ45 connector Laser Class (IEC60825-1) Class 1 laser product - - Dimensions (H x W x D) mm (Base Mounting Side 98mm) 106 x 27.8 x 110 106 x 56 x 110 106 x 27.8 x 110 Weight (kg) 0.18 0.26 0.17	Maximum Number of Connectible Stations		nectible	120 stations (control station: 1, normal station: 119) (*1)				
Maximum Number of Groups 32 Communication Method Token ring Token passing Optical Fiber Specifications Standard: IEEE802.3, IEC 60793-2-10 Types A1a.1 Outside diameter of the core/clad: S0µm, 62.5µm/125µm Transmission loss: 3.0dB/km or lower [λ850nm] Transmission loss: 3.0dB/km or lower [λ850nm] - Connector Specifications Duplex LC connector: Standard: IEC 61754-20 Type LC connector; Connection loss: 0.3dB or lower; Polished surface: PC (Physical Contact) polishing RJ45 connector Laser Class (IEC60825-1) Class 1 laser product - - Dimensions (H x W x D) mm (Base Mounting Side 98mm) 106 x 27.8 x 110 106 x 56 x 110 106 x 27.8 x 110 Weight (kg) 0.18 0.26 0.17	Maximum Number of Networks		vorks	239				
Communication Method Token ring Token passing Optical Fiber Specifications Standard: IEEE802.3, IEC 60793-2-10 Types A1a.1 Outside diameter of the core/clad: S0µm, 62.5µm/125µm Transmission loss: 3.0dB/km or lower [A850m] Transmission loss: 3.0dB/km or lower [A850m]	Maximum Number of Groups		ips	32				
Optical Fiber Specifications Standard: IEEE802.3, IEC 60793-2-10 Types A1a.1 Outside diameter of the core/clad: S0µm, 62.5µm/125µm Transmission loss: 3.0dB/km or lower [\\\000450m] Transmission loss: 3.0dB/km or lower [\\000450m] Transmission loss: 3.0dB/km or lower [\\000450m] - Connector Specifications Duplex LC connector: Standard: IEC 61754-20 Type LC connector; Connection loss: 0.3dB or lower; Polished surface: PC (Physical Contact) polishing RJ45 connector Laser Class (IEC60825-1) Class 1 laser product - - Dimensions (H x W x D) mm (Base Mounting Side 98mm) 106 x 27.8 x 110 106 x 56 x 110 106 x 27.8 x 110 Weight (kg) 0.18 0.26 0.17	Communication Method			Token ring		Token passing		
Connector Specifications Duplex LC connector: Standard: IEC 61754-20 Type LC connector; Connection Ioss: 0.3dB or lower; Polished surface: PC (Physical Contact) polishing RJ45 connector Laser Class (IEC60825-1) Class 1 laser product - - Dimensions (H x W x D) mm (Base Mounting Side 98mm) 106 x 27.8 x 110 106 x 56 x 110 106 x 27.8 x 110 Weight (kg) 0.18 0.26 0.17	Optical Fiber Specifications		15	Standard: IEEE802.3, IEC 60793-2-10 Types A1a.1 Outside diameter of the core/clad: 50μm, 62.5μm/125μm Transmission loss: 3.0dB/km or lower [λ.850nm] Transmission band: 500MHz•km or higher (λ=850nm)		-		
Laser Class (IEC60825-1) Class 1 laser product - Dimensions (H x W x D) mm (Base Mounting Side 98mm) 106 x 27.8 x 110 106 x 56 x 110 106 x 27.8 x 110 Weight (kg) 0.18 0.26 0.17	Connector Specifications			Duplex LC connector: Standard: IEC 61754-20 Type LC connector; Connection loss: 0.3dB or lower; Polished surface: PC (Physical Contact) polishing		RJ45 connector		
Dimensions (H x W x D) mm (Base Mounting Side 98mm) 106 x 27.8 x 110 106 x 56 x 110 106 x 27.8 x 110 Weight (kg) 0.18 0.26 0.17	Laser Class (IEC60825-1)			Class 1 laser product		-		
Weight (kg) 0.18 0.26 0.17	Dimensions (H x W x D) mm (Base Mounting Side 98mm)		nm m)	106 x 27.8 x 110	106 x 56 x 110	106 x 27.8 x 110		
	Weight (kg)			0.18	0.26	0.17		

Note 1: When using a CC-Link IE Controller Network-equipped module in a normal station, maximum number of connectible stations differs depending on the CPU module used in a control station. For details, refer to User's Manual for the control station used.

CC-Link IE Control Level Master/Local Network Modules

CC-Link IE is an industry leading alternative for open control level networking. Originally introduced as MELSECNET/G, it introduces an unprecedented 1Gbit/s Ethernet physical layer fiber topology for system performance surpassing any other network technology. MELSECNET/G has been turned over to the open administration of the CC-Link Partner Association (CLPA), and is now known as CC-Link IE. Mitsubishi Electric offers full support for CC-Link IE via the Q Series Controller.

CC-Link IE Control Optical Fiber Cordsets

Model Number	Description	Stocked Item
QGM-B-LL	CC-Link IE cordset, where _ represents length 1, 2, 3, 5, 10, 15, 20, 25, 30, 35, 40 or 50 meters	S
Belden	Belden part numbers. Ordered directly through Belden	-

Model Number		QJ71GP21-SX	QJ71GP21S-SX	
Stocked Item		S	-	
Certification		UL • CUL • CE		
Network Commo	n Memory	256 kB		
Transient Transr	nission Capacity	960 bytes		
Communication	Speed	IGB		
Number of Stations Per Network		When Universal model QCPU is used for control station: 120; (Control station: 1, Normal station: 119); When High Performance model QCPU is used for control station: 64 (Control station: 1, Normal station: 63)		
Connection Cable		Optical fiber cable (Multi-mode fiber)		
Overall Cable Distance		66000m (When 120 stations are connected)		
Max. Station-To-Station Distance		550m		
Max. Number of Networks		239		
Max. Number of Groups		32		
I/O Device Points Occupied		32	48 (I/O assignment: Empty first half: 16 points, Latter half: 32 points for intelli.)	
	Voltage		20.4V to 31.2VDC	
	Current		0.28A	
External Power	Terminal Screw Size		M3	
Supply	Applicable Solderless Terminal	No external power supply function	R1.25-3	
	Allowable Momentary Power Failure Time		1ms (Level PS1)	
Internal Current Consumption (5VDC)		0.85A	0.90A	
Weight (kg)		0.18	0.28	
Base Unit Slots Occupied		1	2	