

TECHNICAL BULLETIN

[1/4]

[Issue No.]	FA-A-0260
[Title]	Production discontinuation of MELSECNET/10 network module
[Date of Issue]	March 2018
[Relevant Models]	A1SJ71LP21, A1SJ71BR11, A1SJ71QLP21, A1SJ71QBR11

Thank you for your continued support of Mitsubishi Electric programmable controllers, MELSEC-AnS/QnAS series. Production of the following MELSECNET/10 network modules will be discontinued.

1 Models to be discontinued

Product	Series	Model
MELSECNET/10 network module	MELSEC-AnS series	A1SJ71LP21
		A1SJ71BR11
	MELSEC-QnAS series	A1SJ71QLP21
		A1SJ71QBR11

2 Schedule

Order acceptance: Until February 28, 2019 Production discontinuation: March 31, 2019

3 Reason for discontinuation

Some parts of the above products are now obsolete, and we will have difficulty to maintain our production system.

4 Repair support

Repair support period: Until March 31, 2026 (for seven years after the discontinuation of production)

5 Alternative models

Models to be discontinued		Alternative models		
Series	Model	Series	Model	
MELSEC-AnS series	A1SJ71LP21	MELSEC-Q series	QJ71LP21-25	
	A1SJ71BR11		QJ71BR11	
MELSEC-QnAS series	A1SJ71QLP21		QJ71LP21-25	
	A1SJ71QBR11		QJ71BR11	

Point P

Replace the whole system, including the power supply module, base unit, and CPU module, with that of the MELSEC-Q series.

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE : TOKYO BUILDING, 2-7-3 MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN NAGOYA WORKS : 1-14 , YADA-MINAMI 5-CHOME , HIGASHI-KU, NAGOYA , JAPAN

6 Procedure and precautions for replacement

For details, refer to the following.

Transition from MELSEC-A/QnA (Large Type), AnS/QnAS (Small Type) Series to Q Series Handbook (Network Modules) L08048ENG

7 Performance specifications comparison between the discontinued and alternative models

7.1 Performance specifications comparison between A1SJ71LP21/ A1SJ71QLP21 and QJ71LP21-25

Item			Models to be discontinued		Alternative models	
			A1SJ71LP21	A1SJ71QLP21	QJ71LP21-25	
Maximum number	PLC to	LX/LY	8192 points		8192 points	
of link points per	PLC	LB	8192 points		16384 points (MELSECNET/10 mode: 8192 points)	
network	network Remote	LW	8192 points		16384 points (MELSECNET/10 mode: 8192 points)	
		LX/LY	8192 points		8192 points	
	I/O LB network		8192 points		16384 points (remote master station \rightarrow remote submaster station/remote I/O station: 8192 points, remote submaster station/remote I/O station \rightarrow remote master station: 8192 points)	
		LW	8192 points		16384 points (remote master station \rightarrow remote submaster station/remote I/O station: 8192 points, remote submaster station/remote I/O station \rightarrow remote master station: 8192 points)	
Maximum number of link points per station	PLC to PLC network		$((LY+LB)\div 8+(2\timesLW))\leq 2000$ bytes		$\label{eq:metric} \begin{array}{l} \blacksquare MELSECNET/H \mbox{ mode}, \mbox{ MELSECNET/10 mode} \\ ((LY + LB) \div 8 + (2 \times LW)) \leq 2000 \mbox{ bytes} \\ \blacksquare MELSECNET/H \mbox{ extended mode} \\ ((LY + LB) \div 8 + (2 \times LW)) \leq 35840 \mbox{ bytes} \end{array}$	
	Remote I/	O network	■Master station \rightarrow remote I/O station ((LY + LB) ÷ 8 + (2 × LW)) ≤ 1600 bytes ■Remote I/O station \rightarrow master station ((LY + LB) ÷ 8 + (2 × LW)) ≤ 1600 bytes	$\label{eq:constraint} \begin{array}{l} \blacksquare Remote master station/ remote submaster station \\ \rightarrow remote I/O station \\ ((LY + LB) \div 8 + (2 \times LW)) \\ \leq 1600 bytes \\ \blacksquare Remote I/O station \rightarrow \\ remote submaster station/ \\ remote submaster station \\ ((LY + LB) \div 8 + (2 \times LW)) \\ \leq 1600 bytes \\ \blacksquare Remote master station \\ \leftrightarrow remote submaster station \\ \leftrightarrow remote submaster station \\ ((LY + LB) \div 8 + (2 \times LW)) \\ \leq 2000 bytes \end{array}$	■Remote master station → remote I/O station $((LY + LB) \div 8 + (2 \times LW)) \le 1600$ bytes ■Remote I/O station → remote master station $((LY + LB) \div 8 + (2 \times LW)) \le 1600$ bytes ■Multiplexed remote master station ↔ multiplexed remote submaster station $((LY + LB) \div 8 + (2 \times LW)) \le 2000$ bytes	
Communication spee	d		10Mbps		25Mbps/10Mbps (using a mode setting switch)	
Number of	PLC to PL	C network	64 stations (control station: 1, normal station: 63)		64 stations (control station: 1, normal station: 63)	
connectable modules per network	Remote I/	O network	65 stations (remote master station: 1, remote I/O station: 64)		65 stations (remote master station: 1, remote I/O station: 64)	
Connection cable			Optical fiber cable		Optical fiber cable	
Applicable connector			Two-core optical connector	plug	Two-core optical connector plug	
Overall cable distance	e		30km		30km	

TECHNICAL BULLETIN

[Issue No.] FA-A-0260

Item		Models to be disconti	inued	Alternative models
		A1SJ71LP21	A1SJ71QLP21	QJ71LP21-25
Distance between stations	25Mbps	-	·	 SI optical cable: 200m H-PCF optical cable: 400m Broad-band H-PCF optical cable: 1km QSI optical cable: 1km
	10Mbps	 SI optical cable: 500m H-PCF optical cable: 1ki Broad-band H-PCF optic QSI optical cable: 1km 		 SI optical cable: 500m H-PCF optical cable: 1km Broad-band H-PCF optical cable: 1km QSI optical cable: 1km
Maximum number of networks		255 (total of the number of PLC to PLC networks and that of remote I/O networks)	239 (total of the number of PLC to PLC networks and that of remote I/O networks)	239 (total of the number of PLC to PLC networks and that of remote I/O networks)
Maximum number of	groups	9		32 (MELSECNET/10 mode: 9)
Number of occupied	I/O points	32 points (I/O assignment:	special 32 points)	32 points (I/O assignment: intelligent 32 points)
Current consumption		0.65A	0.40A	0.55A
External dimensions	Height	130mm		98mm
	Width	34.5mm		27.4mm
	Depth	93.6mm		90mm
Weight		0.18kg		0.11kg

TECHNICAL BULLETIN

7.2 Performance specifications comparison between A1SJ71BR11/ A1SJ71QBR11 and QJ71BR11

Item		Models to be discontin	nued	Alternative model		
			A1SJ71BR11	A1SJ71QBR11	QJ71BR11	
Maximum number	PLC to	LX/LY	8192 points	1	8192 points	
of link points per	PLC	LB	8192 points		16384 points (MELSECNET/10 mode: 8192 points)	
network	network	LW	8192 points		16384 points (MELSECNET/10 mode: 8192 points)	
Ĩ	Remote	LX/LY	8192 points		8192 points	
	I/O	LB	8192 points		16384 points (remote master station \rightarrow remote	
ne	network				submaster station/remote I/O station: 8192 points,	
					remote submaster station/remote I/O station \rightarrow remote master station: 8192 points)	
		LW	8192 points		16384 points (remote master station \rightarrow remote	
					submaster station/remote I/O station: 8192 points, remote submaster station/remote I/O station \rightarrow remote	
					master station: 8192 points)	
Aaximum number PLC to PLC network		$((LY + LB) \div 8 + (2 \times LW)) \le 2000$ bytes		■MELSECNET/H mode, MELSECNET/10 mode		
of link points per					$((LY + LB) \div 8 + (2 \times LW)) \le 2000$ bytes	
station					MELSECNET/H extended mode	
	During	0	- Andread and a first		$((LY + LB) \div 8 + (2 \times LW)) \le 35840$ bytes	
	Remote I/	O network	■Master station → remote I/O station	■Remote master station/ remote submaster station	■Remote master station \rightarrow remote I/O station ((LY + LB) \div 8 + (2 × LW)) ≤ 1600 bytes	
			$((LY + LB) \div 8 + (2 \times LW))$	\rightarrow remote I/O station	■Remote I/O station \rightarrow remote master station	
			≤ 1600 bytes	$((LY + LB) \div 8 + (2 \times LW))$	$((LY + LB) \div 8 + (2 \times LW)) \le 1600$ bytes	
			■Remote I/O station \rightarrow	≤ 1600 bytes	■Multiplexed remote master station ↔ multiplexed	
			master station $((LY + LB) \div 8 + (2 \times LW))$	■Remote I/O station → remote master station/	remote submaster station ((LY + LB) \div 8 + (2 × LW)) \leq 2000 bytes	
			\leq 1600 bytes	remote submaster station		
				$((LY + LB) \div 8 + (2 \times LW))$		
				≤ 1600 bytes		
				■Remote master station ↔ remote submaster		
				station		
				((LY + LB) ÷ 8 + (2 × LW))		
Communication spee	d		10Mbps	≤ 2000 bytes	10Mbps	
Number of		C network	10Mbps		32 stations (control station: 1, normal station: 31)	
	PLC to PLC network		32 stations (control station: 1, normal station: 31)		33 stations (remote master station: 1, remote I/O	
	Pomoto I/	O notwork	33 stations (remote master station: 1, remote I/O station: 32)		station: 32)	
connectable	Remote I/	O network	station: 32)		station: 32)	
connectable nodules per network	Remote I/	O network	station: 32)			
connectable modules per network Connection cable		O network	High frequency coaxial cab		High frequency coaxial cable	
connectable modules per network Connection cable		O network	High frequency coaxial cab • Connector plug for 3C-2 ¹	V	High frequency coaxial cable • Connector plug for 3C-2V	
connectable modules per network Connection cable		O network	High frequency coaxial cab	V V	High frequency coaxial cable	
connectable modules per network Connection cable Applicable connector		O network	High frequency coaxial cab • Connector plug for 3C-2 ¹ • Connector plug for 5C-2 ¹	V V	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V	
connectable modules per network Connection cable Applicable connector		O network	High frequency coaxial cab • Connector plug for 3C-2 ¹ • Connector plug for 5C-2 ¹ • Connector plug for 5C-FI	V V	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB	
connectable nodules per network Connection cable Applicable connector		O network	High frequency coaxial cab • Connector plug for 3C-2 ⁴ • Connector plug for 5C-2 ⁴ • Connector plug for 5C-FI • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A	V V B A6BR10, A6BR10-DC) can	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) can	
connectable modules per network Connection cable Applicable connector Overall cable distance	e	O network	High frequency coaxial cab • Connector plug for 3C-2 ⁴ • Connector plug for 5C-2 ⁴ • Connector plug for 5C-FI • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (<i>A</i> extend the distance to 2.5k	V V B A6BR10, A6BR10-DC) can m.	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) care extend the distance to 2.5km.	
connectable nodules per network Connection cable Applicable connector	e	O network	High frequency coaxial cab • Connector plug for 3C-2 ⁴ • Connector plug for 5C-2 ⁴ • Connector plug for 5C-FI • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (<i>A</i> extend the distance to 2.5k 255 (total of the number	A6BR10, A6BR10-DC) can m. 239 (total of the number	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) cale extend the distance to 2.5km. 239 (total of the number of PLC to PLC networks and	
connectable nodules per network Connection cable Applicable connector	e	O network	High frequency coaxial cab • Connector plug for 3C-2 ⁴ • Connector plug for 5C-2 ⁴ • Connector plug for 5C-FI • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (<i>A</i> extend the distance to 2.5k	V V B A6BR10, A6BR10-DC) can m.	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) care extend the distance to 2.5km.	
connectable nodules per network Connection cable Applicable connector	e	O network	High frequency coaxial cab Connector plug for 3C-2 ¹ Connector plug for 5C-2 ¹ Connector plug for 5C-FI 3C-2V: 300m 5C-2V/5C-FB: 500m Using a repeater module (<i>A</i> extend the distance to 2.5k 255 (total of the number of PLC to PLC networks	A6BR10, A6BR10-DC) can m. 239 (total of the number of PLC to PLC networks	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) car extend the distance to 2.5km. 239 (total of the number of PLC to PLC networks and	
Applicable distance	e	O network	High frequency coaxial cab Connector plug for 3C-2 ¹ Connector plug for 5C-2 ¹ Connector plug for 5C-FI 3C-2V: 300m 5C-2V/5C-FB: 500m Using a repeater module (<i>A</i> extend the distance to 2.5k 255 (total of the number of PLC to PLC networks and that of remote I/O	A6BR10, A6BR10-DC) can m. 239 (total of the number of PLC to PLC networks and that of remote I/O	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) car extend the distance to 2.5km. 239 (total of the number of PLC to PLC networks and	
connectable modules per network Connection cable Applicable connector Overall cable distance Maximum number of	e networks groups	O network	High frequency coaxial cab Connector plug for 3C-2 ¹ Connector plug for 5C-2 ¹ Connector plug for 5C-FI 3C-2V: 300m 5C-2V/5C-FB: 500m Using a repeater module (<i>A</i> extend the distance to 2.5k 255 (total of the number of PLC to PLC networks and that of remote I/O networks)	A6BR10, A6BR10-DC) can m. 239 (total of the number of PLC to PLC networks and that of remote I/O networks)	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) car extend the distance to 2.5km. 239 (total of the number of PLC to PLC networks and that of remote I/O networks)	
connectable modules per network Connection cable Applicable connector Overall cable distance Maximum number of Maximum number of Number of occupied I	e networks groups I/O points	O network	High frequency coaxial cab • Connector plug for 3C-2 ⁴ • Connector plug for 5C-2 ⁴ • Connector plug for 5C-FI • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (<i>A</i> extend the distance to 2.5k 255 (total of the number of PLC to PLC networks and that of remote I/O networks) 9	A6BR10, A6BR10-DC) can m. 239 (total of the number of PLC to PLC networks and that of remote I/O networks)	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) car extend the distance to 2.5km. 239 (total of the number of PLC to PLC networks and that of remote I/O networks) 32 (MELSECNET/10 mode: 9)	
connectable modules per network Connection cable Applicable connector Overall cable distance Maximum number of Maximum number of Number of occupied I Current consumption	e networks groups I/O points	O network	High frequency coaxial cab Connector plug for 3C-2 ¹ Connector plug for 5C-2 ¹ Connector plug for 5C-7 ¹ 3C-2V: 300m 5C-2V/5C-FB: 500m Using a repeater module (<i>k</i> extend the distance to 2.5k 255 (total of the number of PLC to PLC networks and that of remote I/O networks) 9 32 points (I/O assignment:	A6BR10, A6BR10-DC) can m. 239 (total of the number of PLC to PLC networks and that of remote I/O networks)	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) car extend the distance to 2.5km. 239 (total of the number of PLC to PLC networks and that of remote I/O networks) 32 (MELSECNET/10 mode: 9) 32 points (I/O assignment: intelligent 32 points)	
Maximum number of sources of sources of the second	e networks groups I/O points	O network	High frequency coaxial cab Connector plug for 3C-2 ¹ Connector plug for 5C-2 ¹ Connector plug for 5C-7 ¹ 3C-2V: 300m 5C-2V/5C-FB: 500m Using a repeater module (<i>A</i> extend the distance to 2.5k 255 (total of the number of PLC to PLC networks and that of remote I/O networks) 9 32 points (I/O assignment: 0.80A	A6BR10, A6BR10-DC) can m. 239 (total of the number of PLC to PLC networks and that of remote I/O networks)	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) car extend the distance to 2.5km. 239 (total of the number of PLC to PLC networks and that of remote I/O networks) 32 (MELSECNET/10 mode: 9) 32 points (I/O assignment: intelligent 32 points) 0.75A	
connectable modules per network Connection cable Applicable connector Overall cable distance Maximum number of Maximum number of Number of occupied I Current consumption	e networks groups I/O points Height	O network	High frequency coaxial cab • Connector plug for 3C-2 ⁴ • Connector plug for 5C-2 ⁴ • Connector plug for 5C-FI • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (<i>A</i> extend the distance to 2.5k 255 (total of the number of PLC to PLC networks and that of remote I/O networks) 9 32 points (I/O assignment: 0.80A 130mm	A6BR10, A6BR10-DC) can m. 239 (total of the number of PLC to PLC networks and that of remote I/O networks)	High frequency coaxial cable • Connector plug for 3C-2V • Connector plug for 5C-2V • Connector plug for 5C-FB • 3C-2V: 300m • 5C-2V/5C-FB: 500m Using a repeater module (A6BR10, A6BR10-DC) car extend the distance to 2.5km. 239 (total of the number of PLC to PLC networks and that of remote I/O networks) 32 (MELSECNET/10 mode: 9) 32 points (I/O assignment: intelligent 32 points) 0.75A 98mm	