

Product Information

Transmission rates

IAM-6MC1001MTA

IAM-6MC1001MRA

IAM-6MC1001M0A

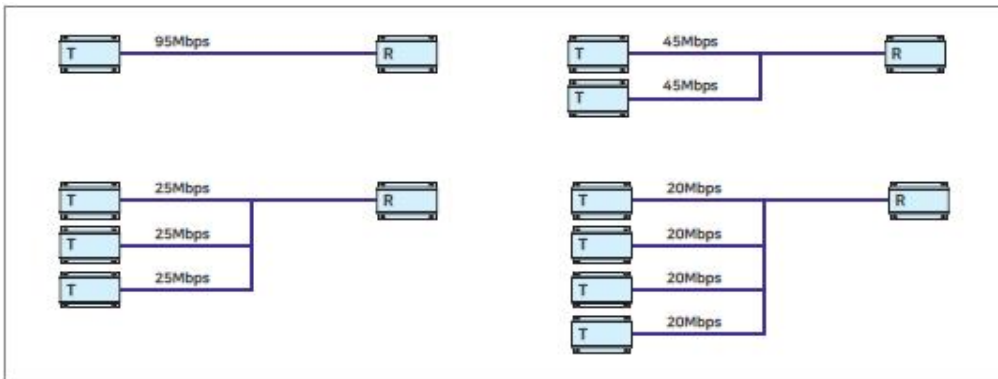
IEB-72M2812MCA

IED-62M2812MCS

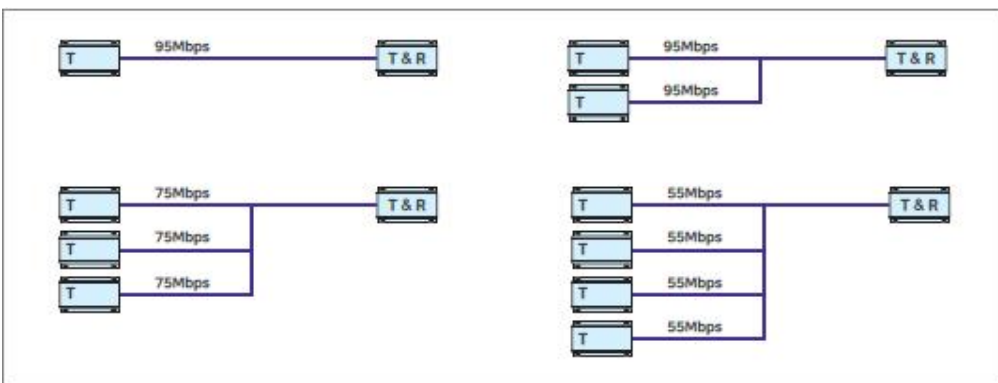
Transmission rate division by product combination

Please note: The following schematics explain the general behaviour of the transmission rate division depending on the used products. Real transmission rates are influenced by cable quality and cable length. Please find more details on real transmission rates on the following pages.

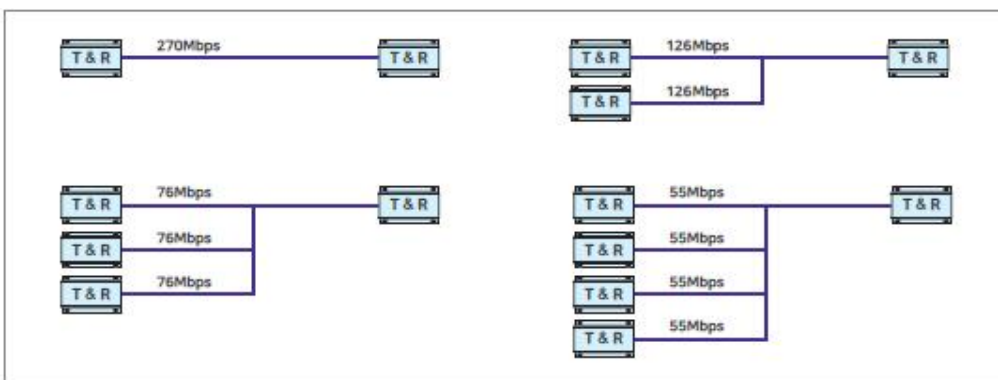
Daisy chain using Transmitter (T) and Receiver (R)



Daisy chain using Transmitter (T) and Transceiver (T&R)



Daisy chain using Transceivers (T&R)



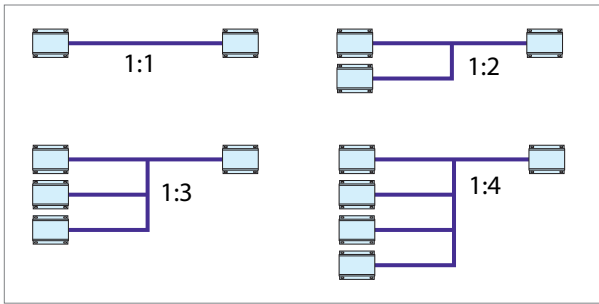
Legend

T = IAM-6MC1001MTA (221576 Transmitter)

R = IAM-6MC1001MRA (221577 Receiver)

T & R = IAM-6MC1001MOA (221273 Transceiver)

Bandwidth and PoC output per port by products



221273 IAM-6MC1001M0A (Transeiver)
(up to 270Mbps & 60W)

Transmission rate (Mbps) by product configuration (270Mbps)

Distance/Daisy Chain	1:1	1:2	1:3	1:4	1:5	1:6	1:7	1:8
	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)
200m	257	126	76	55	41	31	25	20
600m	254	115	56	32	22	16	12	10
1200m	140	60	30	15				
1800m	90	35	13					
2400m	22							
3200m	8							

PoC output (W) by product configuration (max. 60W)

Distance/Daisy Chain	1:1	1:2	1:3	1:4	1:5	1:6	1:7	1:8
	POC output (W)	POC output (W)	POC output (W)	POC output (W)	POC output (W)	POC output (W)	POC output (W)	POC output (W)
50m	55	26	17	12	9	7	6	
200m	45	21	13	9	7	5		
300m	31	14	9	6				
400m	23	10	6					
500m	18	8						
700m	12	5						

221576 IAM-6MC1001MTA (Transmitter)
221577 IAM-6MC1001MRA (Receiver)
(up to 95Mbps & 60W)

Transmission rate (Mbps) by product configuration

Distance/Daisy Chain	1:1	1:2	1:3	1:4	1:5	1:6	1:7	1:8
	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)	Data Rate (Mbps)
200m	95	47	31	23	18	15	12	10
600m	95	47	31	23	18	14	11	
1200m	95	3	26	18	13	10		
1800m	95	41	23	15	10			
2400m	50	18						

PoC output (W) by product configuration

Distance/Daisy Chain	1:1	1:2	1:3	1:4	1:5	1:6	1:7	1:8
	POC output (W)	POC output (W)	POC output (W)	POC output (W)	POC output (W)	POC output (W)	POC output (W)	POC output (W)
50m	40	18	12	8	6			
200m	35	16	10	7	5			
300m	27	12	7	5				
400m	22	10	6					
500m	17	7						
700m	11							

Cable distance

Ethernet over Coax (EoC) products have different Ethernet and PoC transmission distance depending on the product lineup. Check the maximum transmission distance between the transmitter and receiver in advance.

■ PoC distance by available wattage to end-device (e.g. Single port product.)

Camera power consumption (W)	3C-2V / RG-59, meter (Bare Copper Cable)	5C-HFBT / RG-6, meter (Bare Copper Cable)
3	900m	1800m
7	750m	1200m
10	550m	900m
12	450m	750m
15	350m	600m
20	300m	500m
25	200m	350m
30	150m	250m
40	60m	100m
50	40m	80m
60	25m	50m

- The above distances are calculated value and the result may vary depending on the cable and connector quality.
- The above mentioned transmission distance is a condition when using single port device with DC 56V/1.2A power supply.
- Cable Loop Resistance is 18Ω / 200m with RG-59 and 10Ω / 200m with RG-6 condition.
- Above result is the value when using Bare Copper Cable and in case of the Copper covered steel cable, the distance can be reduced by about 40 ~ 50% compared with Bare Copper Cable.

2Wire Cable Test Result

221576: IAM-6MC1001MTA Transmitter

221577: IAM-6MC1001MRA-Receiver

221334: IAM-4MU1001M0A BNC auf Zweidraht

Transmission rate(Mbps) by product configuration

2Wire Cable Type	Distance(M)	1:1	1:2	1:3	1:4
		Data Rate(Mbps)	Data Rate(Mbps)	Data Rate(Mbps)	Data Rate(Mbps)
1pair(UTP CAT5)	50	95	48	33	11
	100	95	48	33	11
	150	95	38	15	
	200	95	35	14	
	300	95	30		
	400	95			
Phone Line	50	93			
	100	63	33		
	150	55	30		
	200	37	27		

PoC output(W) by product configuration

2Wire Cable Type	Distance(M)	1:1	1:2	1:3	1:4
		POC output(W)	POC output(W)	POC output(W)	POC output(W)
1pair(UTP CAT5)	50	33	26	20	13
	100	20	16	10	3
	150	18	7	0	
	200	9	5	0	
	300	7	2		
	400	5			
Phone Line	50	9			
	100	4	2		
	150	2	1		
	200	0	0		

* The power voltage of end device is 42V based for IR camera operation while intermediate IR camera consume 7W Power usage.

* Cable Specification

- Cat5 UTP : 10 Ohm/100m
- Phone cable : 16 Ohm/100m

* The red character in POC Output column need the Tx power adapter to supply the power (minimum 42V,7W for IR camera operation) to IAM-6MC1001MTA, however need not power adapter for the only data communication.



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