

# YASKAWA MP Series - Memobus

Supported Series: YASKAWA MP2200, MP2300, MP2300S, MP9xx communication module.

Website: <http://www.yaskawa.com/>

## HMI Setting:

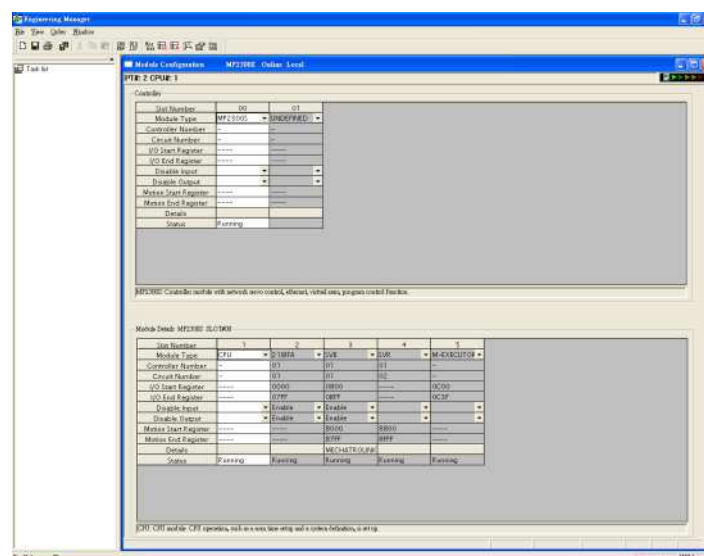
Parameters	Recommended	Options	Notes
PLC type	YASKAWA MP Series - Memobus		
PLC I/F	RS485/Ethernet	RS232/RS485 2w/4w, Ethernet	
Baud rate	19200	9600~57600	
Data bits	8		
Parity	Even		
Stop bits	1		
Port no.	502	default	Ethernet Module Only
PLC sta. no.	1	1-31	

## PLC Setting:

Communication mode	MEMOBUS, Slave, RTU
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## PLC Ethernet Setting:

1. Use MPE720 program software, open Module Configuration, double click "218IFA".



- In Transmission Parameters input MP2300S IP address, Subnet Mask, Gateway IP. In Connection Parameter, CNO -1 input: Local Port=502, Node IP address=000.000.000.000, Node Port=00000, Connect Type=TCP, Protocol Type=MEMOBUS, Code=RTU.

Module Name Definition  
Equipment name : CONTROLLER B

Local Port: 502, Node IP Address: 168, Node Port: 1, Connect Type: (0-255)  
 Local Port: 255, Node IP Address: 255, Node Port: 255, Connect Type: (0-255)  
 Local Port: 0, Node IP Address: 0, Node Port: 0, Connect Type: (0-255)

It is possible to following parameter setting easily that communicate the message.

Local Port	Node IP Address	Node Port	Connect Type	Protocol Type	Code
00502	000.000.000.000	00000	TCP	MEMOBUS	RTU
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It is possible to set easily that communicate the I/O message.

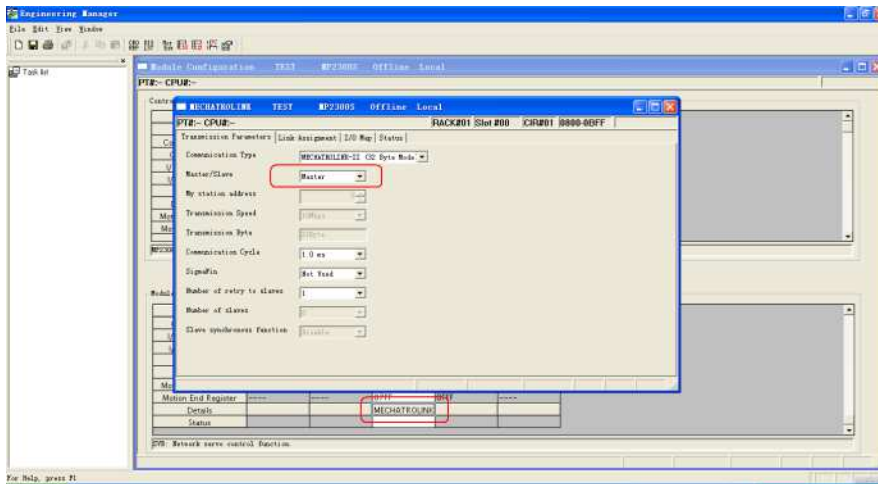
Scan

Local Port	Node IP Address	Node Port	Connect Type	Protocol Type	Code

Head register number data size

input disable	Head register number	data size	W <-	Head register number	data size	W
IW0000	4	W	Hold register(MW)	00000	4	W
OW0004	4	W	W ->	00004	4	W

- Click MECHATROLINK to set up MP2300S PLC as Master.



- Close all dialogs and save to MP2300S.

## Note:

1. Only CNO 01 can auto communicate with one HMI. Other CNO need a ladder program created for communication.
2. DIP SW2-2 of MP2300S must be set to OFF position during normal communication, otherwise, IP address will be erased after reset power, and it will be unable to communicate with HMI when set to ON position.

## Device Address:

Bit/Word	Device type	Format	Range	Memo
B	MB_1	DDDDh	0 ~ 9999f	MB 0 ~ 9999
B	MB_2	DDDDh	100000 ~ 65534f	MB 10000 ~ 65535
B	IB	HHHH	0 ~ a7ff0	Read only
B	IW_Bit	HHHHd	0~ a7ff15	
W	IW	HHHH	0 ~ a7ff	Read only
DW	IL	HHHH	0 ~ a7ff	Read only
DW (F)	IF	HHHH	0 ~ a7ff	Read only
W	MW	DDDD	0 ~ 65534	Holding register
DW	ML	DDDD	0 ~ 65533	Double word
DW (F)	MF	DDDD	0 ~ 65533	Floating point

\*: When connect via Ethernet interface the max range of IW, IL and IF would be restricted.

## Wiring Diagram:

RS-232 9P D-Sub (Diagram 1~ Diagram 3)

### Diagram 1

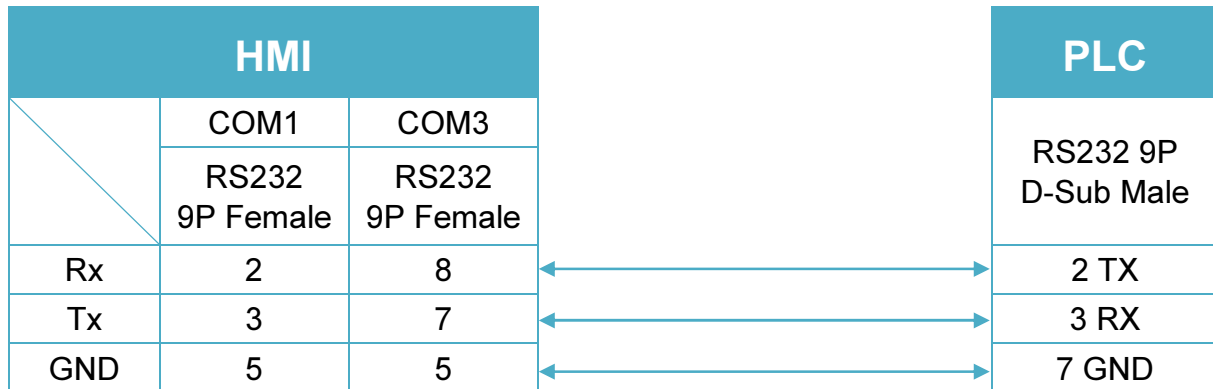
**cMT Series**                      **cMT3071 / cMT3072 / cMT3090 / cMT3103 / cMT3151**

**eMT Series**                      **eMT3070 / eMT3105 / eMT3120 / eMT3150**

**MT-iE**                              **MT8073iE / MT8102iE**

**MT-XE**                              **MT8092XE**

**MT-iP**                              **MT6103iP / MT8102iP**



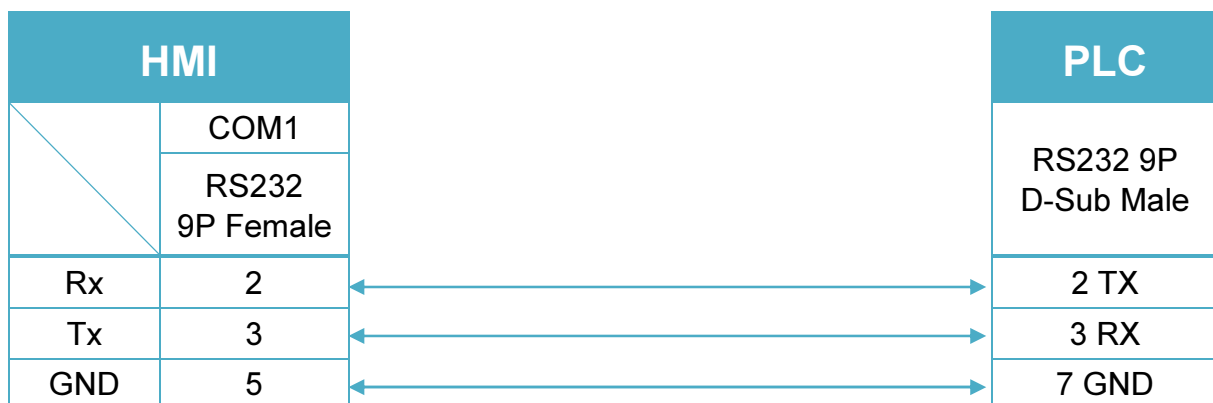
## Diagram 2

**cMT Series**                      *cMT-SVR / cMT-G01 / cMT-G02 / cMT-HDM / cMT-FHD*

**mTV**                                *mTV*

**MT-iE**                                *MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE /  
MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE /  
MT8101iE / MT8102iE / MT8103iE*

**MT-XE**                                *MT8121XE / MT8150XE / MT8090XE*



### Diagram 3

**MT-iE** *MT8050iE / MT8053iE*

**MT-iP** *MT6051iP / MT8051iP / MT6071iP / MT8071iP*

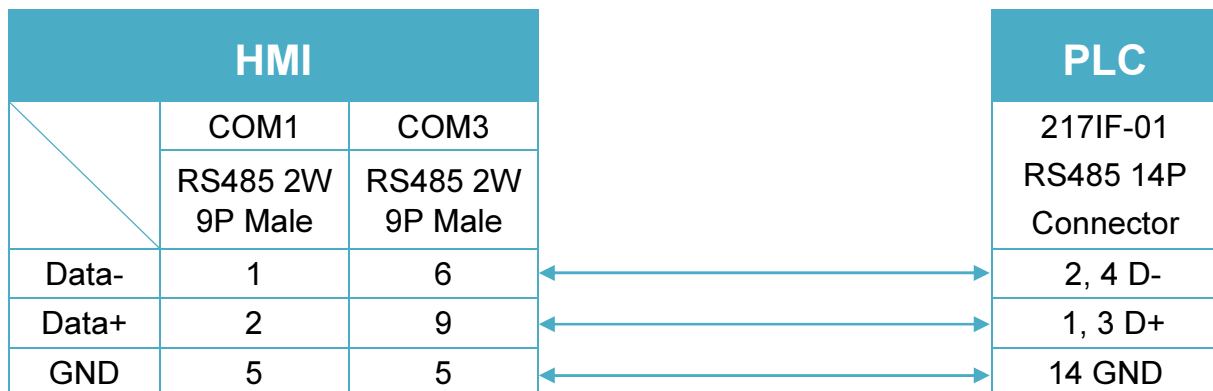


217IF-01 RS485 14 P Connector (Diagram 4~ Diagram 9)

### Diagram 4

**cMT Series** *cMT3151*

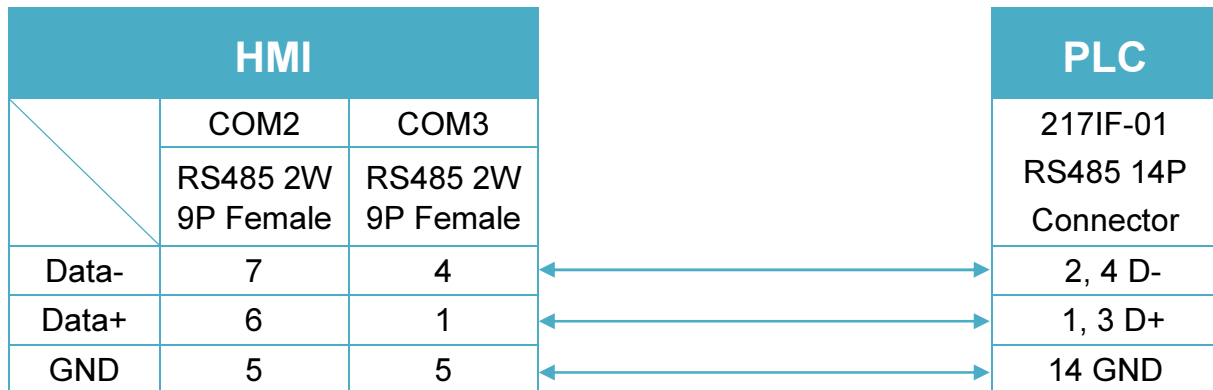
**eMT Series** *eMT3070 / eMT3105 / eMT3120 / eMT3150*



## Diagram 5

**cMT Series**                      *cMT-SVR / cMT-G01 / cMT-G02 / cMT-HDM / cMT-FHD*

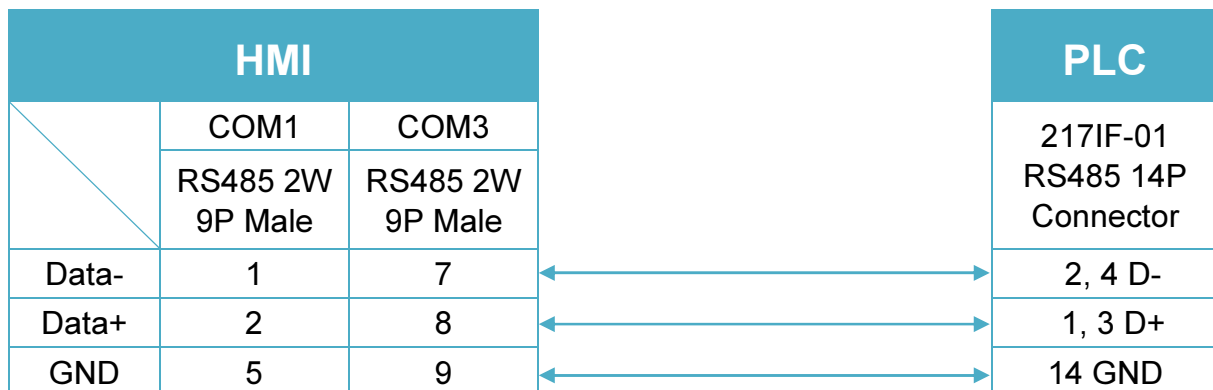
**mTV**                                *mTV*



## Diagram 6

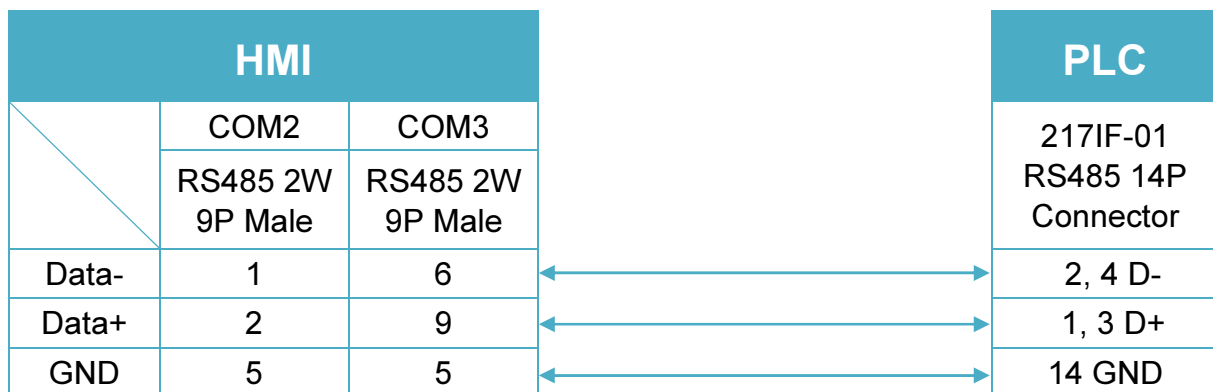
**MT-iE**                                *MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE*

**MT-XE**                                *MT8121XE / MT8150XE*



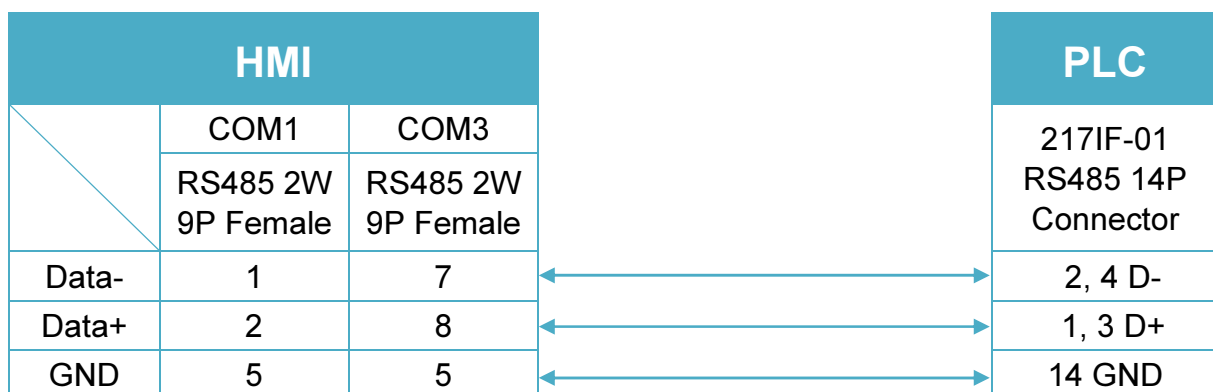
## Diagram 7

<b>cMT Series</b>	<b><i>cMT3071 / cMT3072 / cMT3090 / cMT3103</i></b>
<b>MT-iE</b>	<b><i>MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE / MT8101iE / MT8102iE / MT8103iE</i></b>
<b>MT-XE</b>	<b><i>MT8090XE / MT8092XE</i></b>
<b>MT-iP</b>	<b><i>MT6103iP / MT8102iP</i></b>



## Diagram 8

<b>MT-iE</b>	<b><i>MT8050iE / MT8053iE</i></b>
<b>MT-iP</b>	<b><i>MT6051iP / MT8051iP</i></b>



## Diagram 9

**MT-iP** *MT6071iP / MT8071iP*



217IF-01 RS422 14 P Connector (Diagram 10~ Diagram 13)

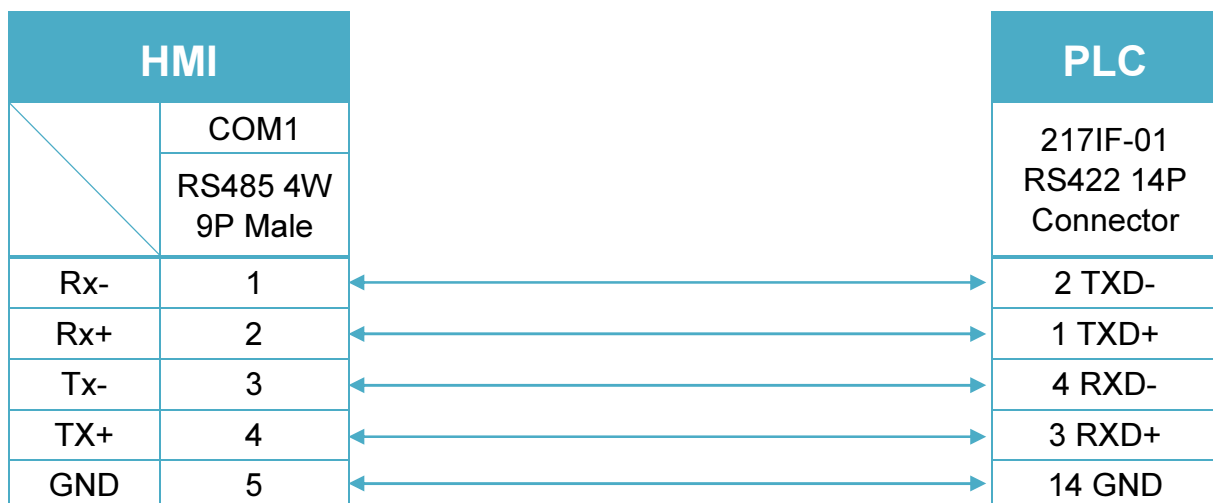
## Diagram 10

**cMT Series** *cMT3151*

**eMT Series** *eMT3070 / eMT3105 / eMT3120 / eMT3150*

**MT-iE** *MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE*

**MT-XE** *MT8121XE / MT8150XE*

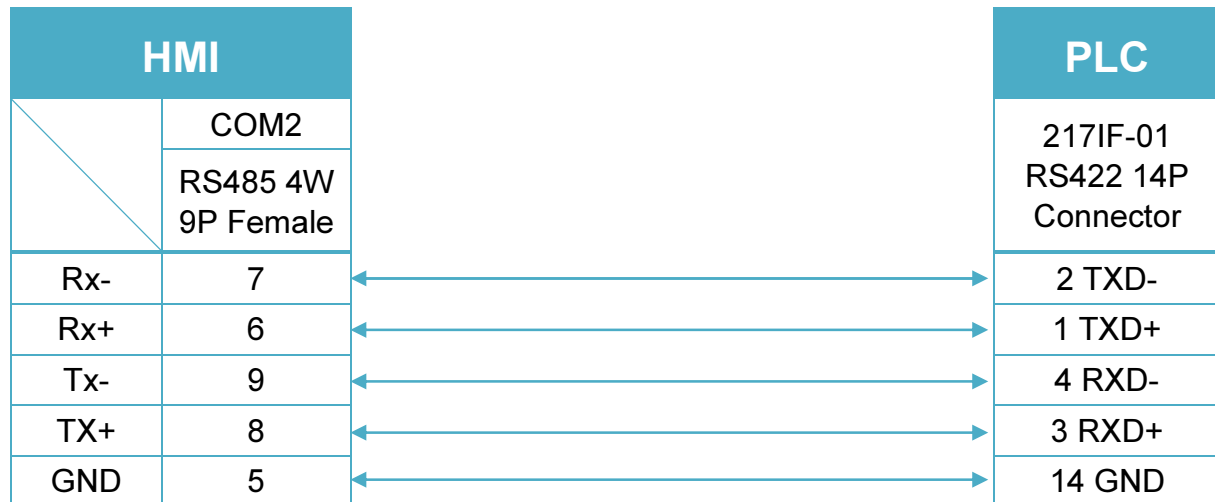




## Diagram 11

**cMT Series**                      *cMT-SVR / cMT-G01 / cMT-G02 / cMT-HDM / cMT-FHD*

**mTV**                                *mTV*



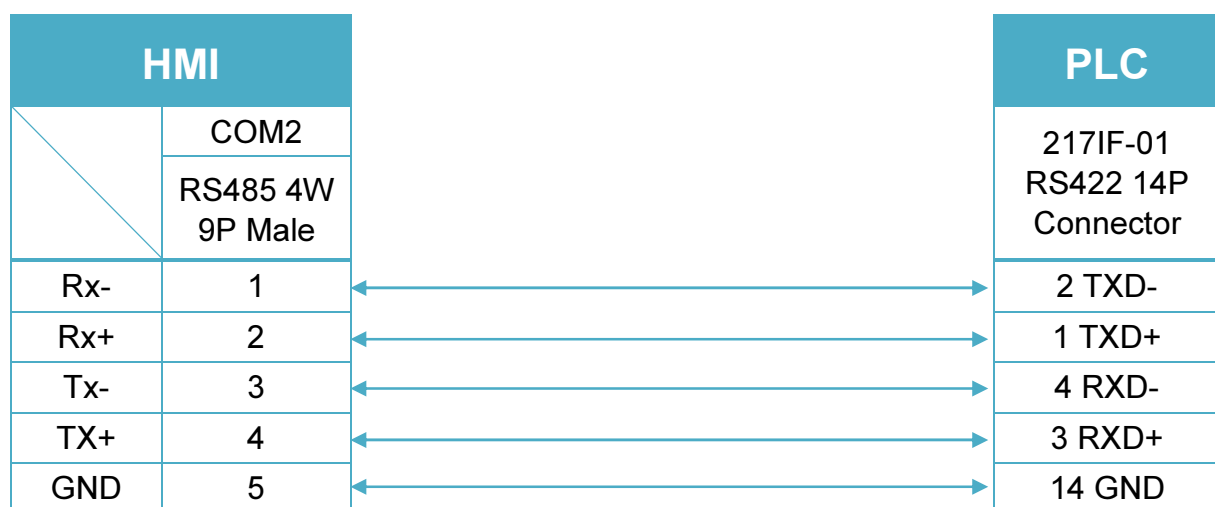
## Diagram 12

**cMT Series**                      *cMT3071 / cMT3072 / cMT3090 / cMT3103*

**MT-iE**                                *MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE /  
MT8101iE / MT8102iE / MT8103iE*

**MT-XE**                                *MT8090XE / MT8092XE*

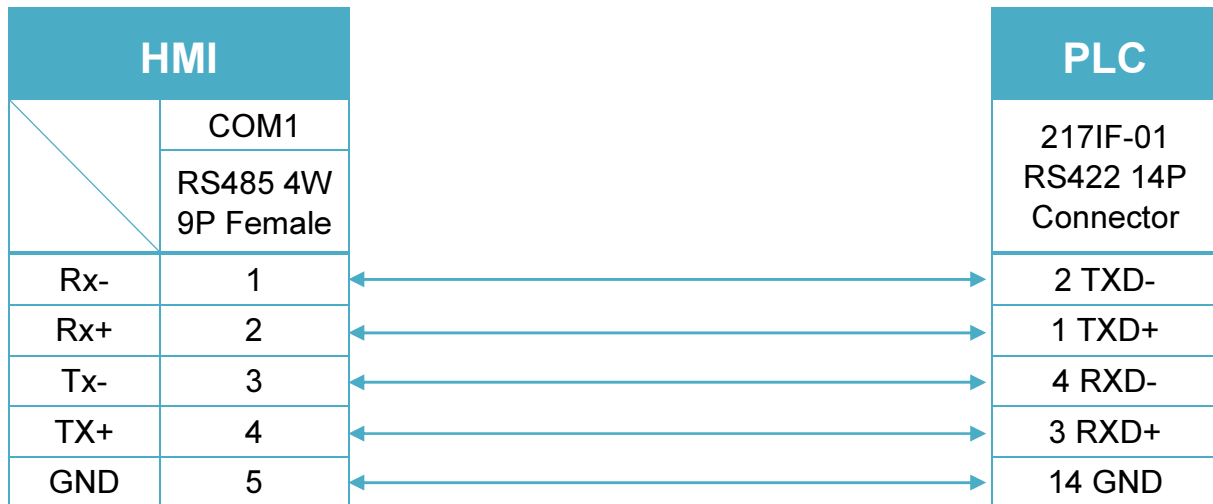
**MT-iP**                                *MT6071iP / MT8071iP / MT6103iP / MT8102iP*



## Diagram 13

**MT-iE**                      *MT8050iE / MT8053iE*

**MT-iP**                      *MT6051iP / MT8051iP*



## Diagram 14

**Ethernet cable:**

