

## FATEK FB/FBs/B1/B1z Series

Supported Series: FATEK FB/FBs/B1/B1z series, FB MC series, and FB MA series need FB-DTBR converter.

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

### HMI Setting:

| Parameters          | Recommended                | Options              | Notes                        |
|---------------------|----------------------------|----------------------|------------------------------|
| <b>PLC type</b>     | FATEK FB/FBs/B1/B1z Series |                      |                              |
| <b>PLC I/F</b>      | RS232                      | RS232/RS485/Ethernet |                              |
| <b>Baud rate</b>    | 9600                       |                      |                              |
| <b>Data bits</b>    | 7                          |                      |                              |
| <b>Parity</b>       | Even                       |                      |                              |
| <b>Stop bits</b>    | 1                          |                      |                              |
| <b>PLC sta. no.</b> | 1                          | 0-255                | Must match PLC port setting. |
| <b>Port no.</b>     | 500                        |                      | Ethernet only.               |

\*Support communications between HMI and PLC in pass-through mode

\*Set LW-9903 to 2 to enhance the speed of download/upload PLC program in pass-through mode

### Device Address:

| Bit/Word | Device type | Format | Range      | Memo                       |
|----------|-------------|--------|------------|----------------------------|
| B        | X           | DDDD   | 0 ~ 9999   | Input                      |
| B        | Y           | DDDD   | 0 ~ 9999   | Output                     |
| B        | M           | DDDD   | 0 ~ 9999   | Internal Relay             |
| B        | S           | DDDD   | 0 ~ 9999   | Step Relay                 |
| B        | T           | DDDD   | 0 ~ 9999   | Timer                      |
| B        | C           | DDDD   | 0 ~ 9999   | Counter                    |
| B        | PLC_MODE    | D      | 0          | PLC mode                   |
| B        | R_Bit       | DDDDdd | 0 ~ 999915 |                            |
| B        | D_Bit       | DDDDdd | 0 ~ 999915 |                            |
| W        | RT          | DDDD   | 0 ~ 9999   | Timer Register             |
| W        | RC          | DDDD   | 0 ~ 9999   | Counter Register           |
| W        | R           | DDDD   | 0 ~ 9999   | Data Register              |
| W        | D           | DDDD   | 0 ~ 9999   | Data Register              |
| W        | DRT         | DDDD   | 0 ~ 9999   | Double Word Timer Register |

| Bit/Word | Device type | Format | Range     | Memo                         |
|----------|-------------|--------|-----------|------------------------------|
| W        | DRC         | DDD    | 200 ~ 255 | Double Word Counter Register |
| W        | WX          | DDDD   | 0 ~ 9999  | Input Word                   |
| W        | WY          | DDDD   | 0 ~ 9999  | Output Word                  |
| W        | WM          | DDDD   | 0 ~ 9999  | Internal Relay Word          |
| W        | WS          | DDDD   | 0 ~ 9999  |                              |
| W        | FR          | DDDD   | 0 ~ 9999  |                              |

## Wiring Diagram:

The following is the view from the soldering point of a connector.

FBs Port0: RS-232 4P Mini-DIN (Diagram 1 ~ Diagram 3)



### Diagram 1

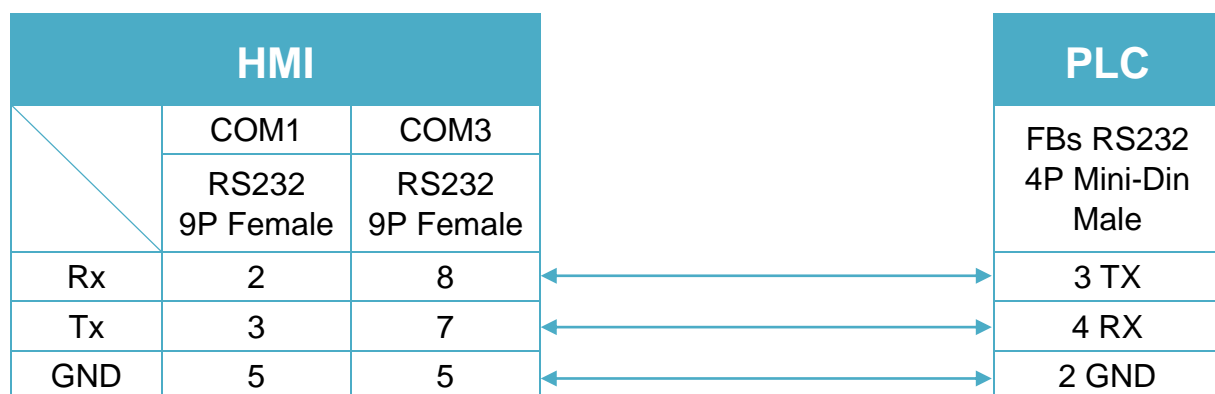
**cMT Series**                      *cMT3071 / cMT3072 / cMT3090 / cMT3103 / cMT3151*

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

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

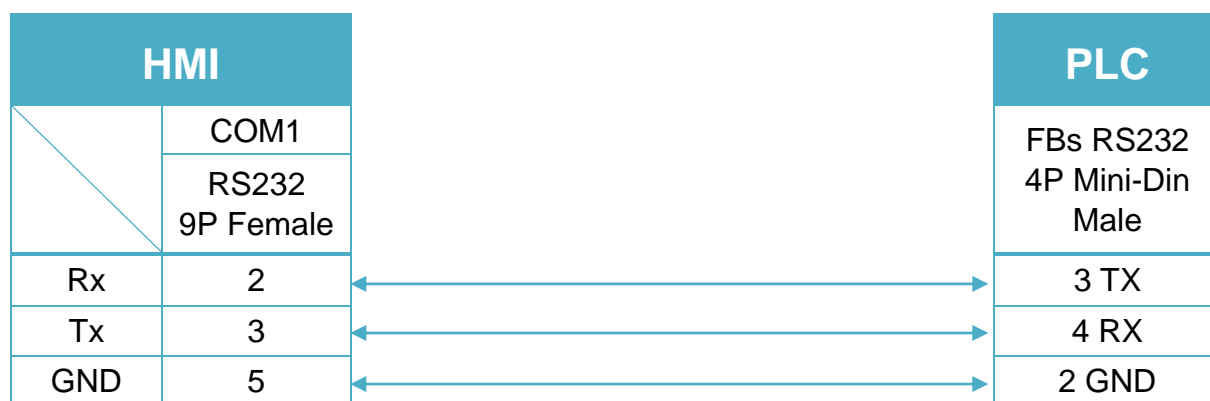
**MT-XE**                              *MT8092XE*

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



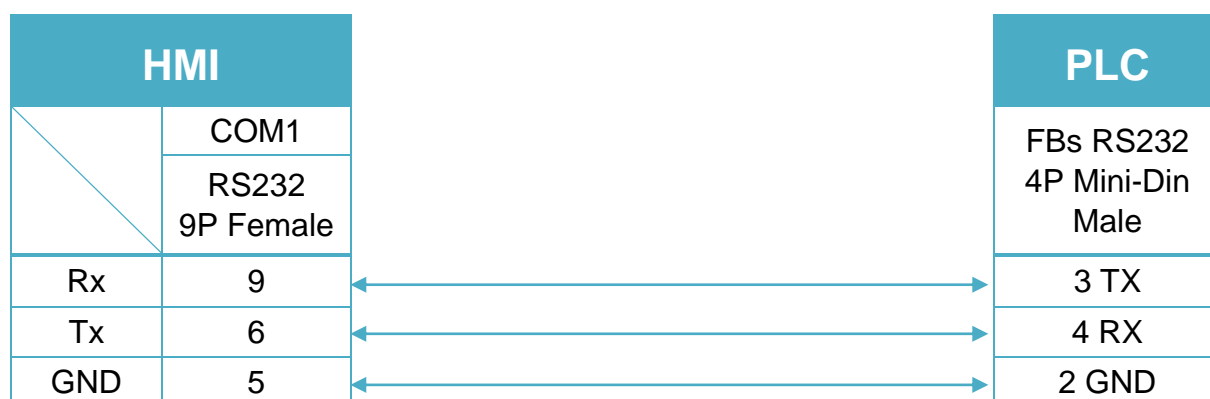
## Diagram 2

|                   |  |
|-------------------|--|
| <b>cMT Series</b> | <b><i>cMT-SVR / cMT-G01 / cMT-G02 / cMT-HDM / cMT-FHD</i></b>  |
| <b>mTV</b>        | <b><i>mTV</i></b>  |
| <b>MT-iE</b>      | <b><i>MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE /<br/>MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE /<br/>MT8101iE / MT8102iE / MT8103iE</i></b> |
| <b>MT-XE</b>      | <b><i>MT8121XE / MT8150XE / MT8090XE</i></b>   |



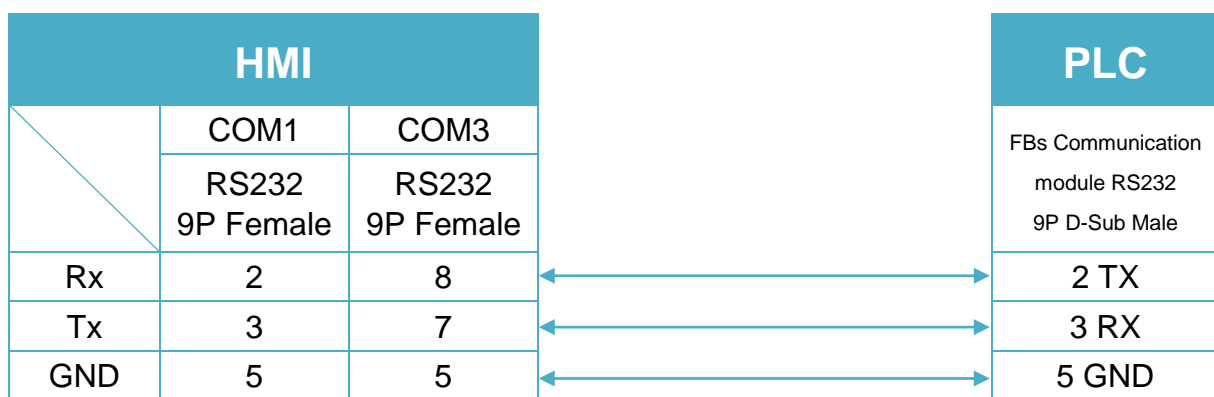
## Diagram 3

|              |   |
|--------------|---|
| <b>MT-iE</b> | <b><i>MT8050iE / MT8053iE</i></b>                       |
| <b>MT-iP</b> | <b><i>MT6051iP / MT8051iP / MT6071iP / MT8071iP</i></b> |

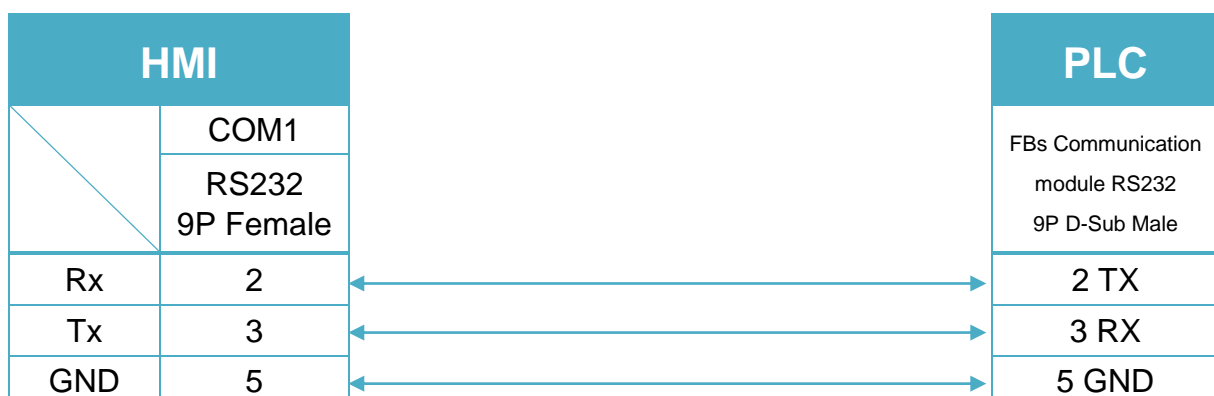


FBs communication module: RS-232 9P D-Sub (Diagram 4 ~ Diagram 6)

### Diagram 4

**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 5

**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 6

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

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

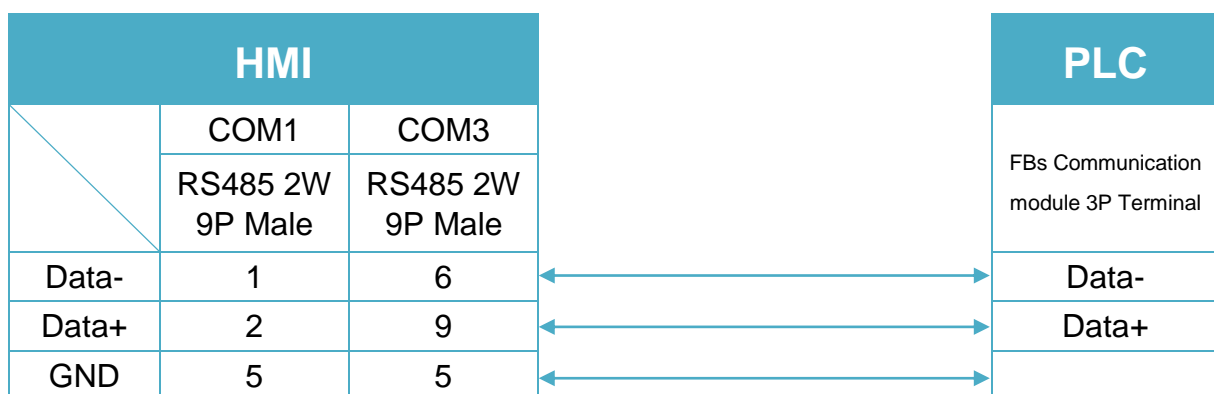


FBs communication module 3P Terminal Block: RS-485 2W Terminal (Diagram 7 ~ Diagram 12)

## Diagram 7

**cMT Series**                      *cMT3151*

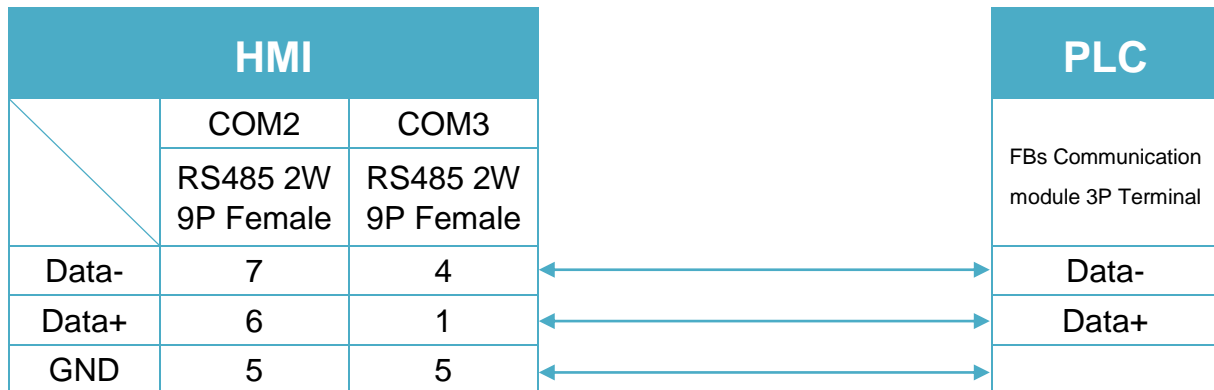
**eMT Series**                      *eMT3070 / eMT3105 / eMT3120 / eMT3150*



## Diagram 8

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

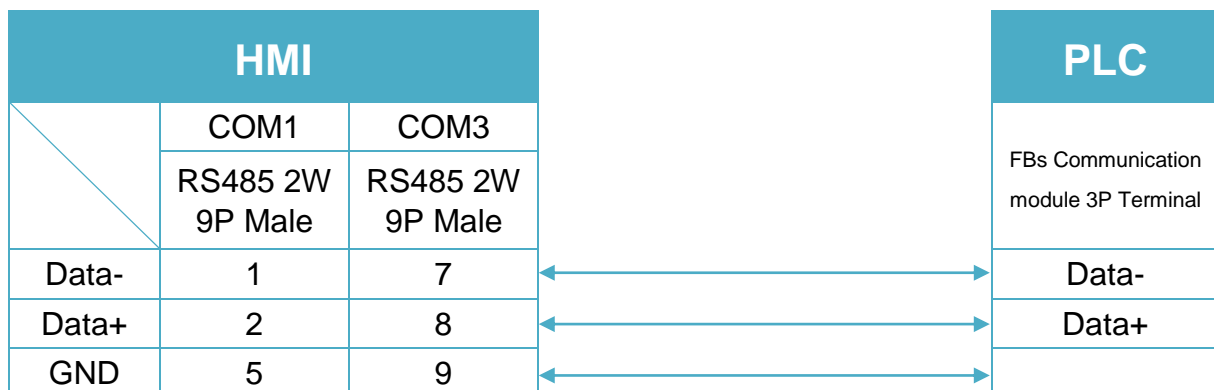
**mTV**                                *mTV*



## Diagram 9

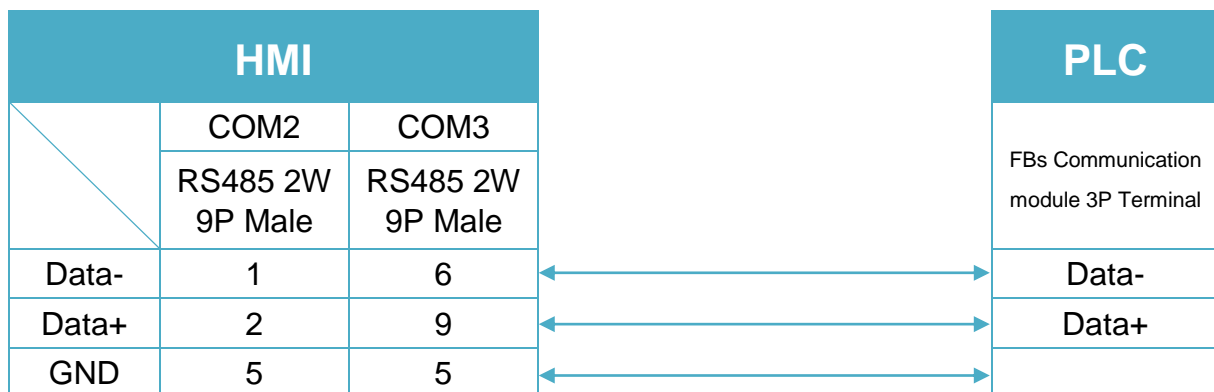
**MT-iE**                                *MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE*

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



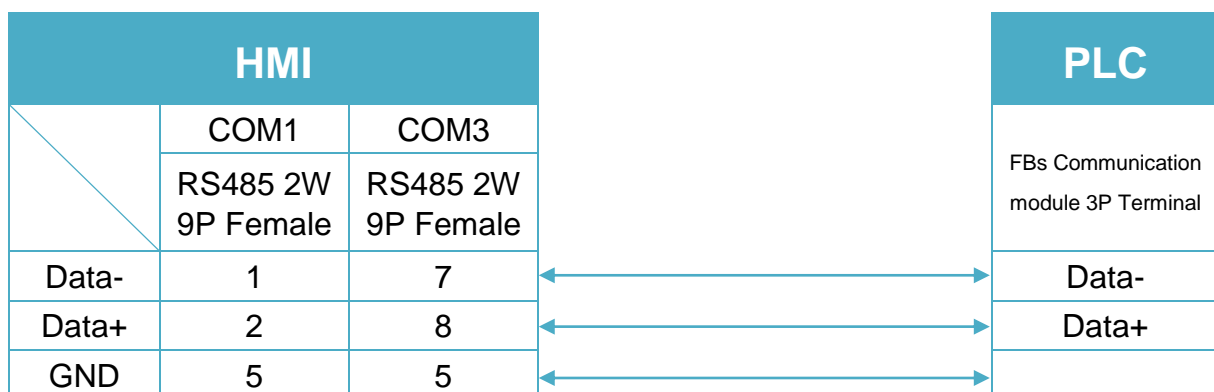
## Diagram 10

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



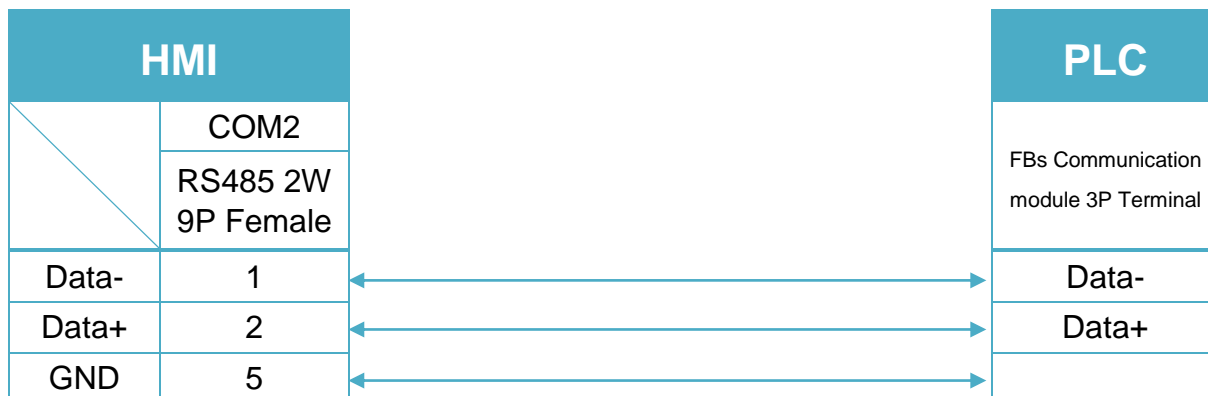
## Diagram 11

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



## Diagram 12

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



CPU Port: RS-232 15P D-Sub (Diagram 13 ~ Diagram 15)

## Diagram 13

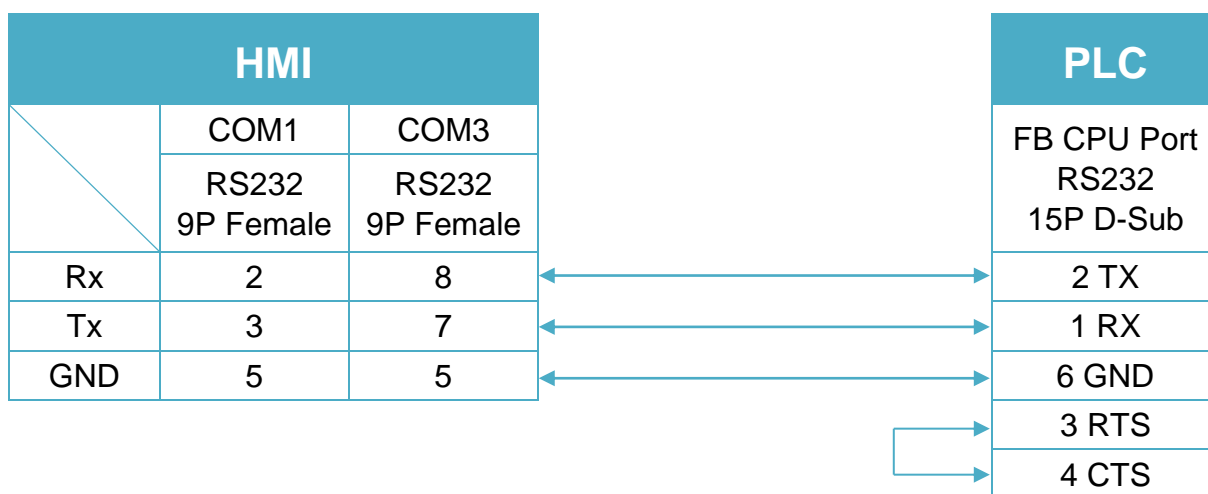
**cMT Series** *cMT3071 / cMT3072 / cMT3090 / cMT3103 / cMT3151*

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

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

**MT-XE** *MT8092XE*

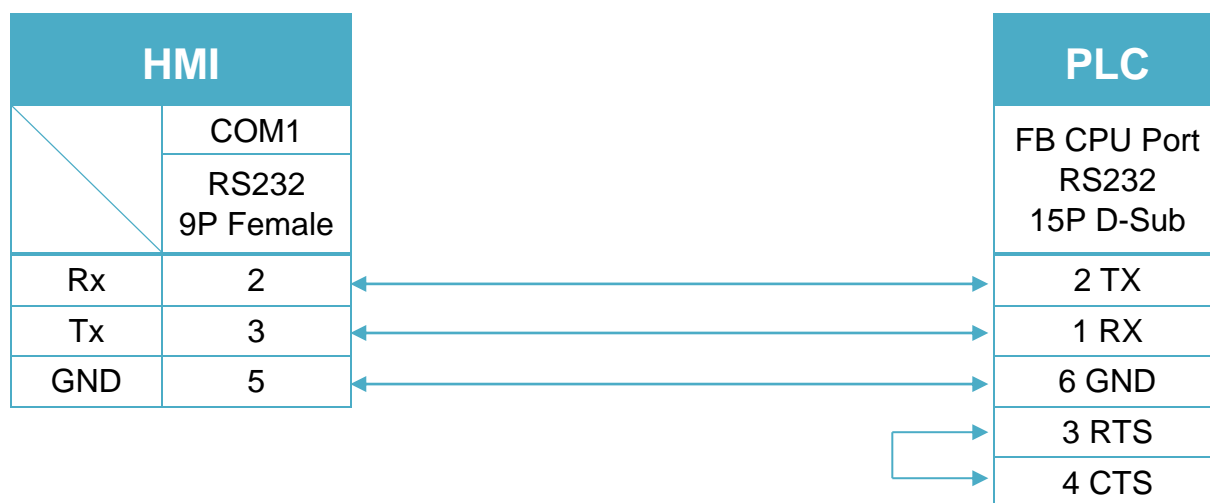
**MT-iP** *MT6103iP / MT8102iP*





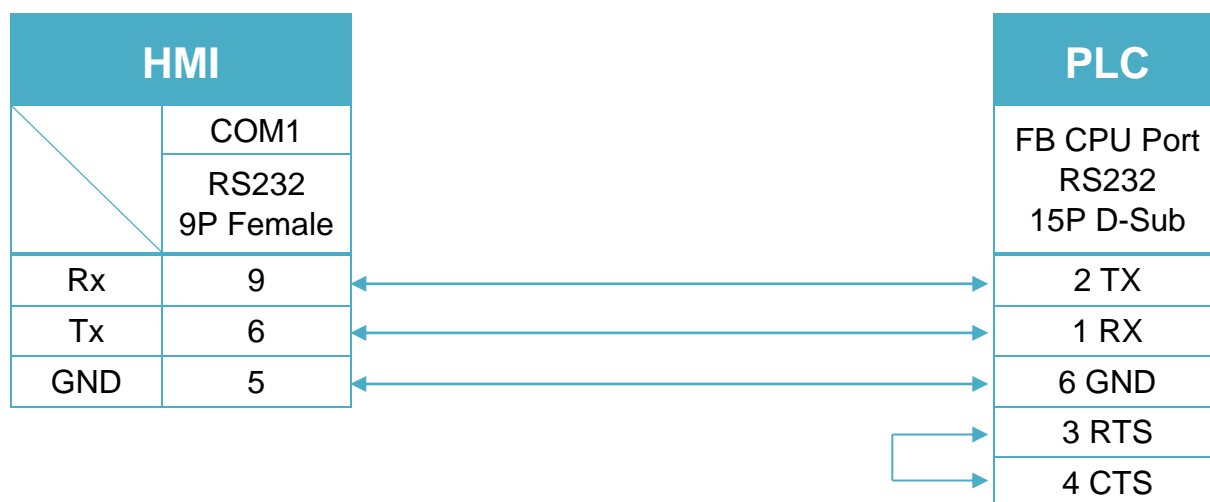
## Diagram 14

|                   |  |
|-------------------|--|
| <b>cMT Series</b> | <b><i>cMT-SVR / cMT-G01 / cMT-G02 / cMT-HDM / cMT-FHD</i></b>  |
| <b>mTV</b>        | <b><i>mTV</i></b>  |
| <b>MT-iE</b>      | <b><i>MT8070iE / MT6070iE / MT8100iE / MT8121iE / MT8150iE /<br/>MT8071iE / MT6071iE / MT8072iE / MT6072iE / MT8073iE /<br/>MT8101iE / MT8102iE / MT8103iE</i></b> |
| <b>MT-XE</b>      | <b><i>MT8121XE / MT8150XE / MT8090XE</i></b>   |



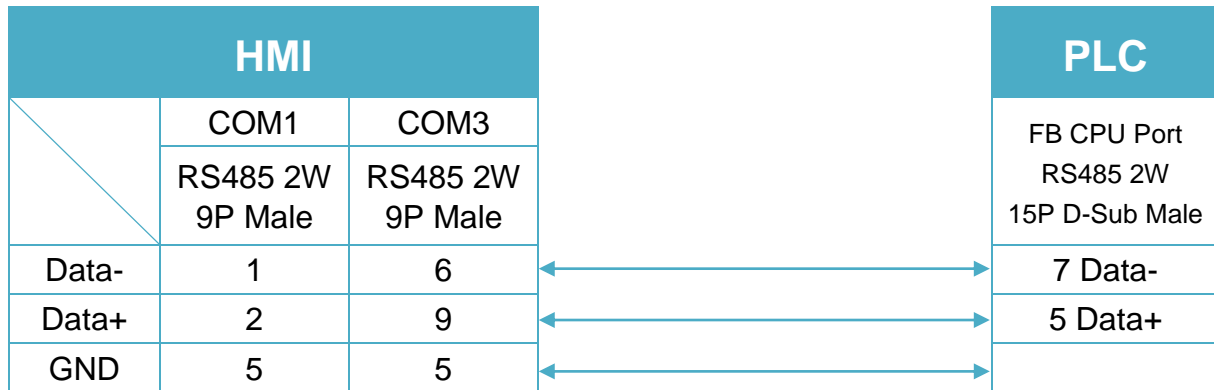
## Diagram 15

|              |   |
|--------------|---|
| <b>MT-iE</b> | <b><i>MT8050iE / MT8053iE</i></b>                       |
| <b>MT-iP</b> | <b><i>MT6051iP / MT8051iP / MT6071iP / MT8071iP</i></b> |

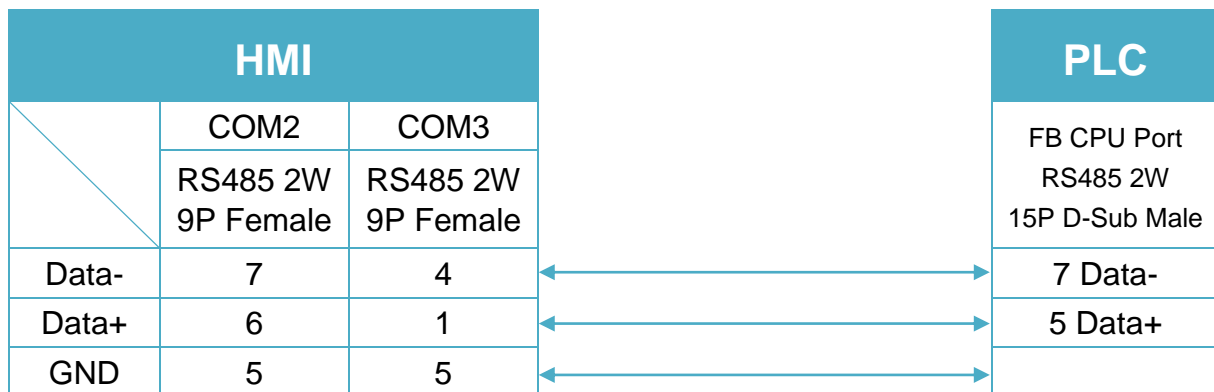


CPU Port: RS-485 2W 15P D-Sub (Diagram 16 ~ Diagram 21)

### Diagram 16

**cMT Series**                      *cMT3151*
**eMT Series**                      *eMT3070 / eMT3105 / eMT3120 / eMT3150*


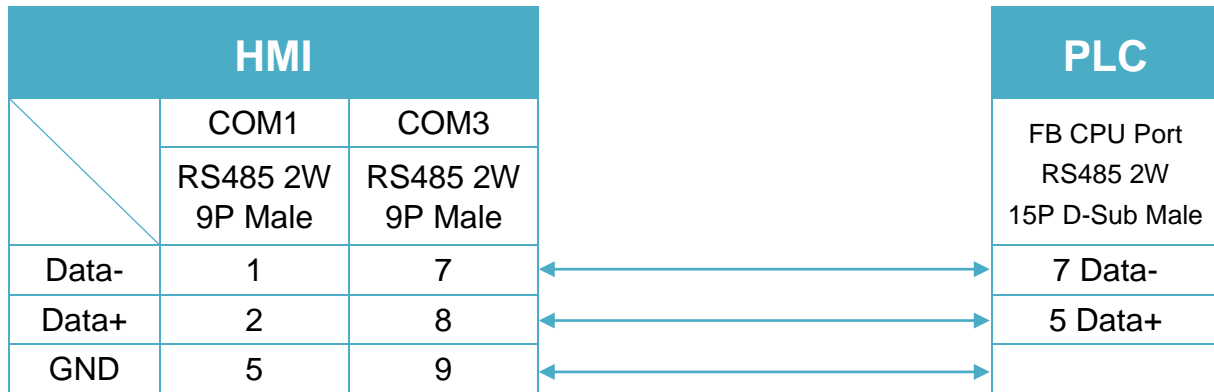
### Diagram 17

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


## Diagram 18

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

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



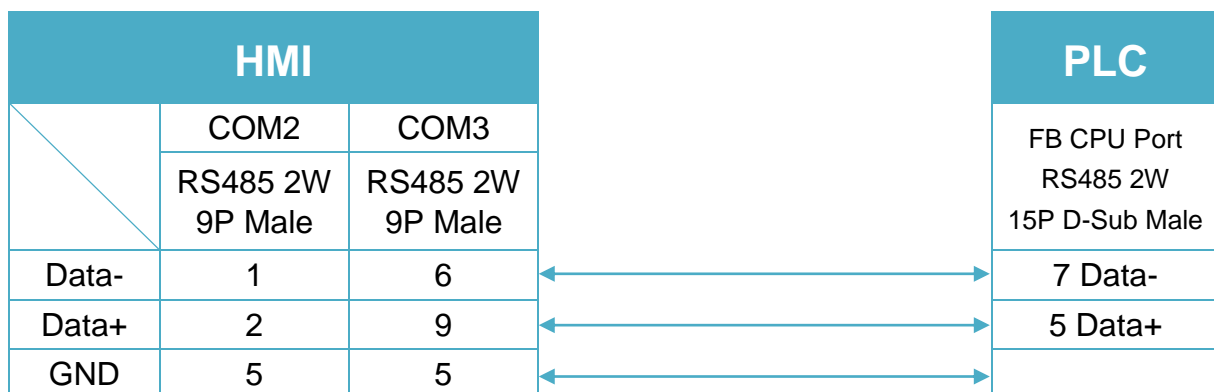
## Diagram 19

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

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

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

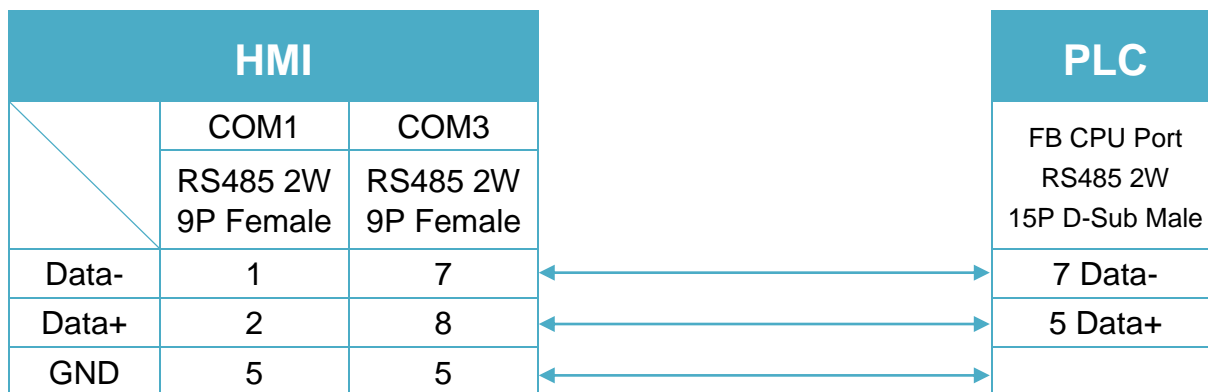
**MT-iP** *MT6103iP / MT8102iP*



## Diagram 20

MT-iE *MT8050iE / MT8053iE*

MT-iP *MT6051iP / MT8051iP*



## Diagram 21

MT-iP *MT6071iP / MT8071iP*



## Diagram 22

Ethernet cable:

