Cost saving in new RS485 network structure

In Fig. 1 you can find the traditional RS485 network structure. When you need to support more RS485 nodes and cover more RS485 network area. You need BRIDGE box between different RS485 segment. So we need TRP-C07 BRIDGE box between RS485 segment A, B, and C. And we need TRP-C06 CONVERTER box for RS232 device to connect in RS485 network.

In Fig. 2 you can find the new RS485 network structure to use TWIN485 CONVERTER and BRIDGE box. We need TWIN485 box between different RS485 network. TWIN485 box can support 2 RS232 device to connect in RS485 network. Because the cost for TWIN485 box is similar as TRP-C06 or TRP-C07 box. So we can say you just need half cost in new TWIN485 based RS485 network.

For example, we need one application environment to have one PC RS232 COM port to control 20 RS232 devices in each segment of 3 RS485 segments. In Fig. 3 you can find that we need 2 TRP-C07 boxes and 61 TRP-C06 boxes. For maintenance purpose you need to prepare TRP-C07 and TRP-C06 box in stock.

In Fig. 4 you can find that we just need 32 TWIN485 boxes. For maintenance purpose you just need to prepare TWIN485 box in stock. So you just need about half cost for initial invest and maintenance requirement. When you need to modify your RS485 network later. You may need to extend your cover distance. Then you need to buy extra TRP-C07 BRIDGE box in traditional structure. In new TWIN485 structure you don't need to buy any box to meet your requirement. Any TWIN485 box in stock can be used as CONVERTER or BRIDGE.

Fig.1 Traditional RS485 Network：TRP-C06 Converter＆TRP-C07 Bridge is different Box.

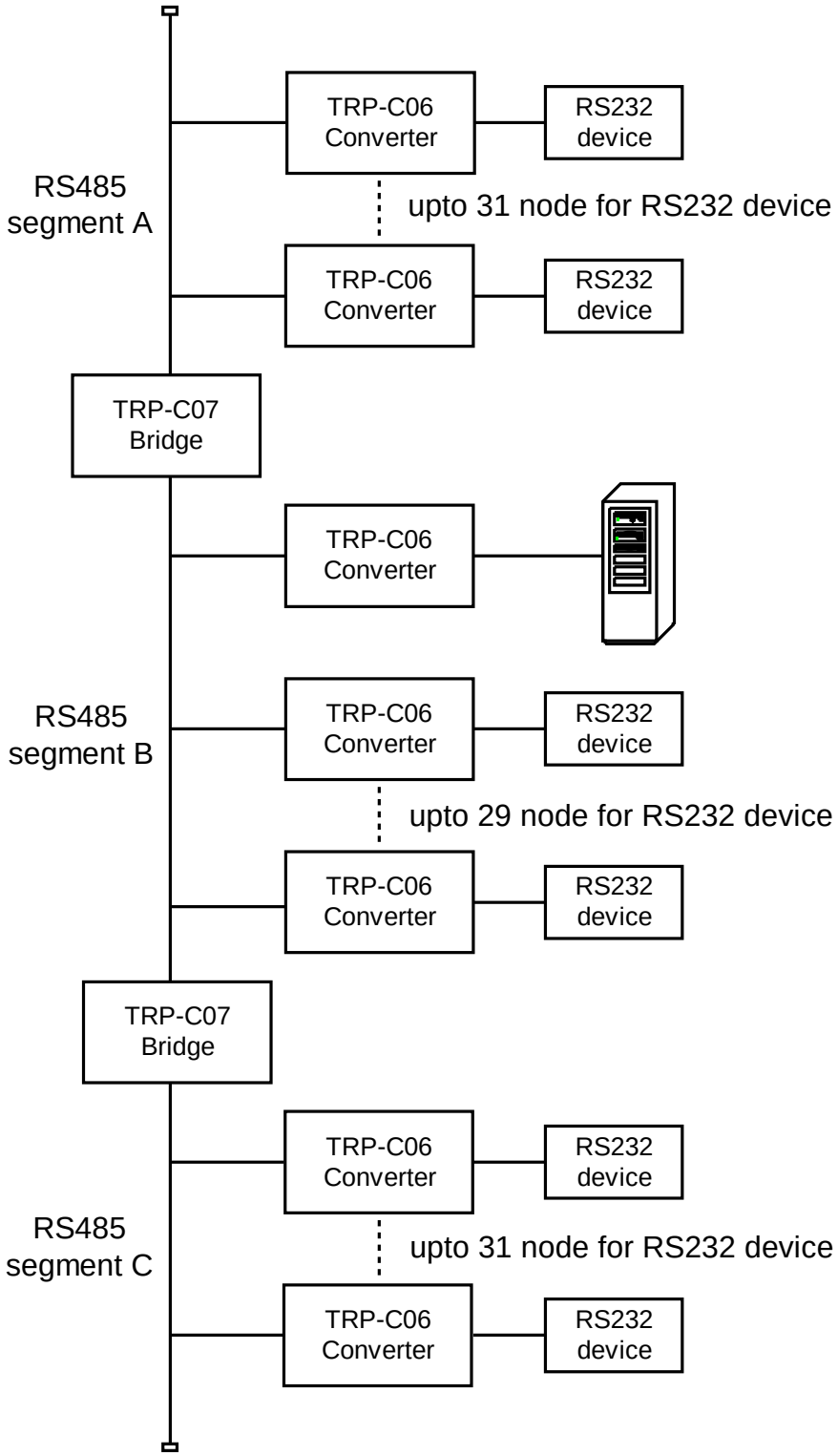


Fig.2 New RS485 Network：TWIN485 Converter & Bridge in one Box.

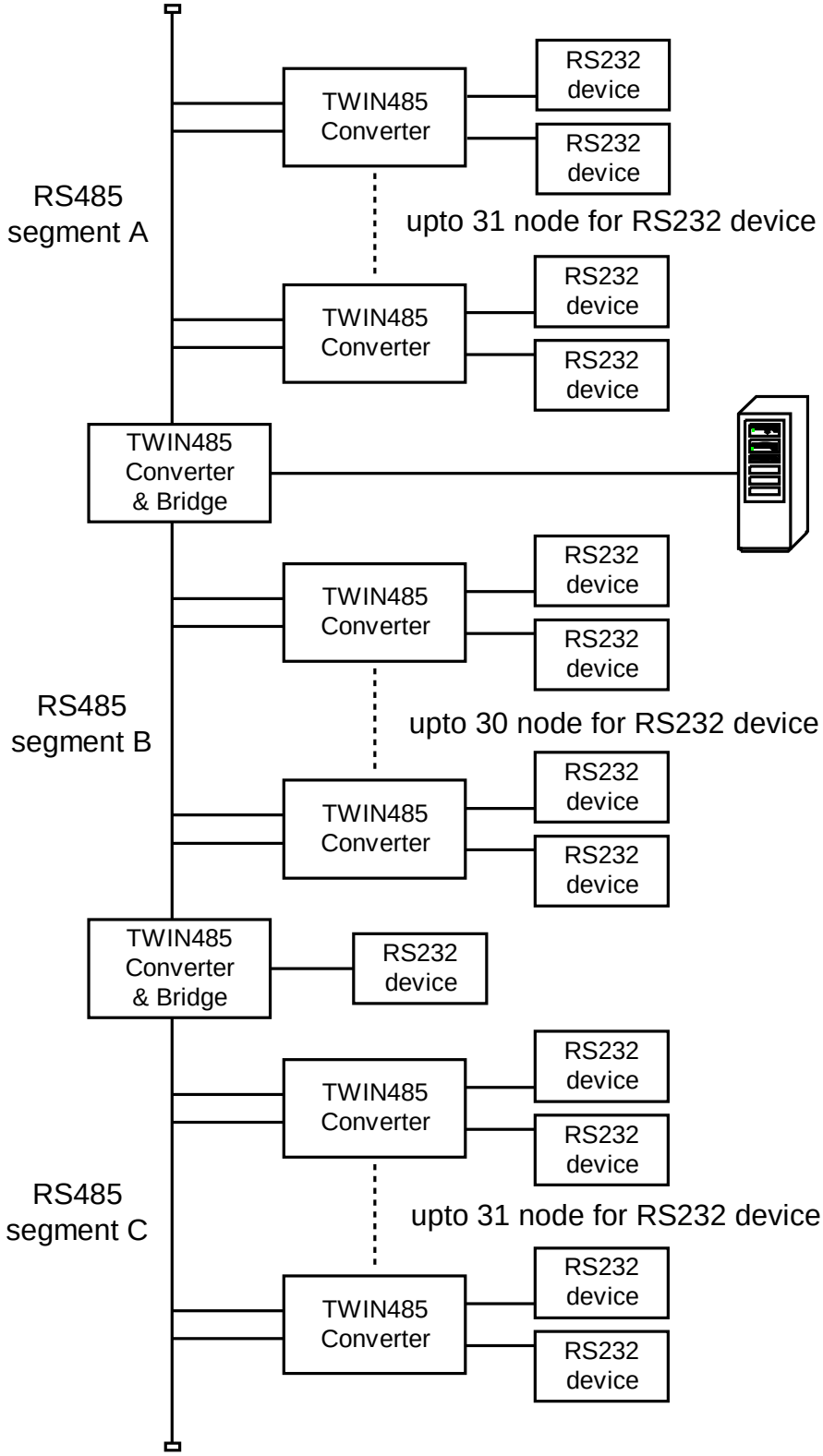
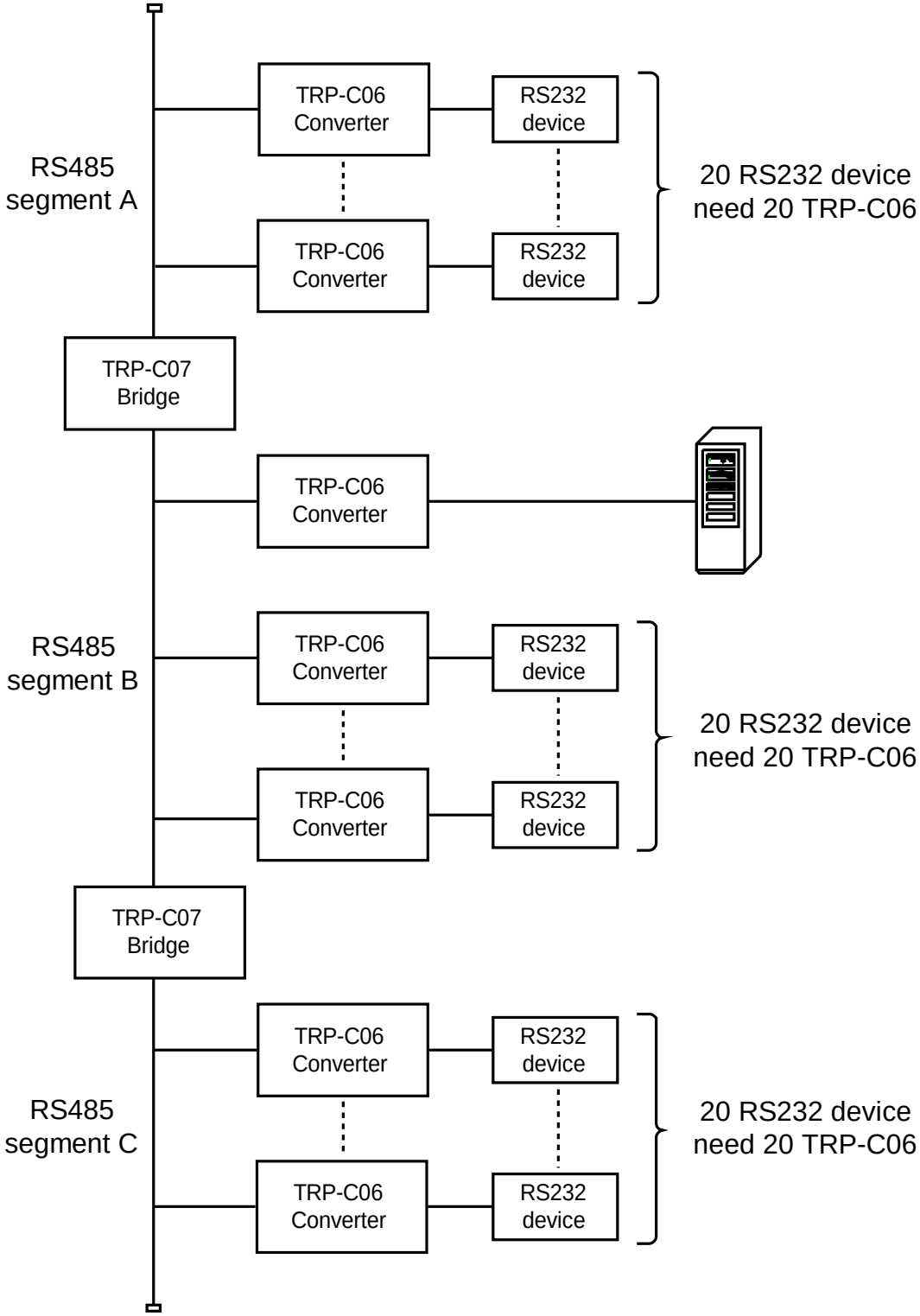
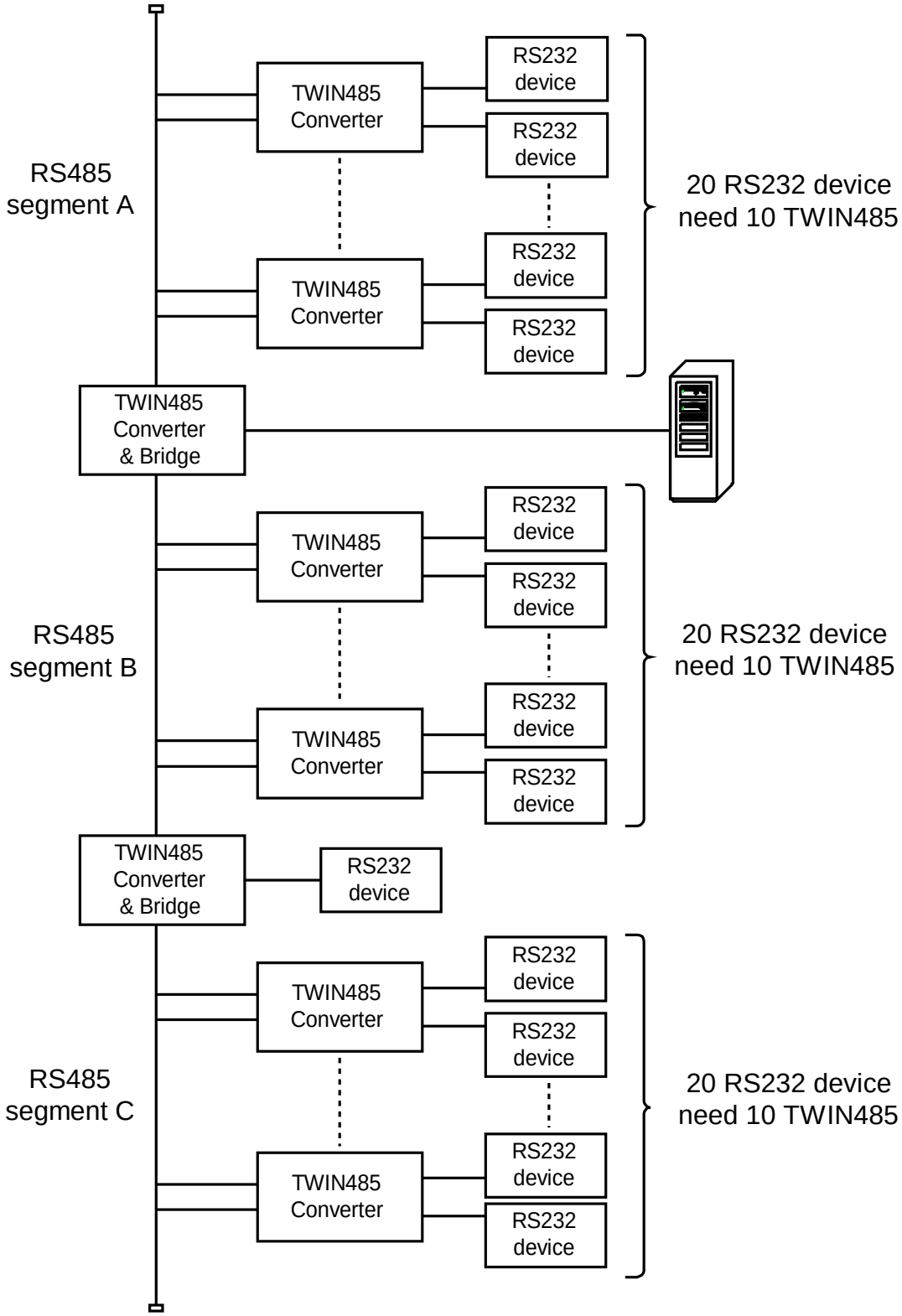


Fig.3 Traditional RS485 Network to handle 20 RS232 device in each segment from one PC RS232 Com Port.



- In above structure you need 2 TRP-C07 Bridge and 61 TRP-C06 converter。
- For maintenance purpose you need to prepare TRP-C07 and TRP-C06 in stock。

Fig.4 New RS485 Network to handle 20 RS232 device in each segement from one PC RS232 Com Port.



- IN above structure you need 32 TWIN485 Box only.
- For maintenance purpose you just need to prepare TWIN485 in stock.