



## 10004/1/1

## Communication module (COM)

### Description

Communication (COM) modules are used for:

- communication between redundant Central Parts in an FSC configuration,
- communication between a master FSC system and slave FSC systems,
- external communication with integrated control systems and/or printers, etc., and
- external communication with the FSC user station.

For these functions, the communication module supports serial communication links for either RS422, RS232C, RS485, current loop or glass fiber.

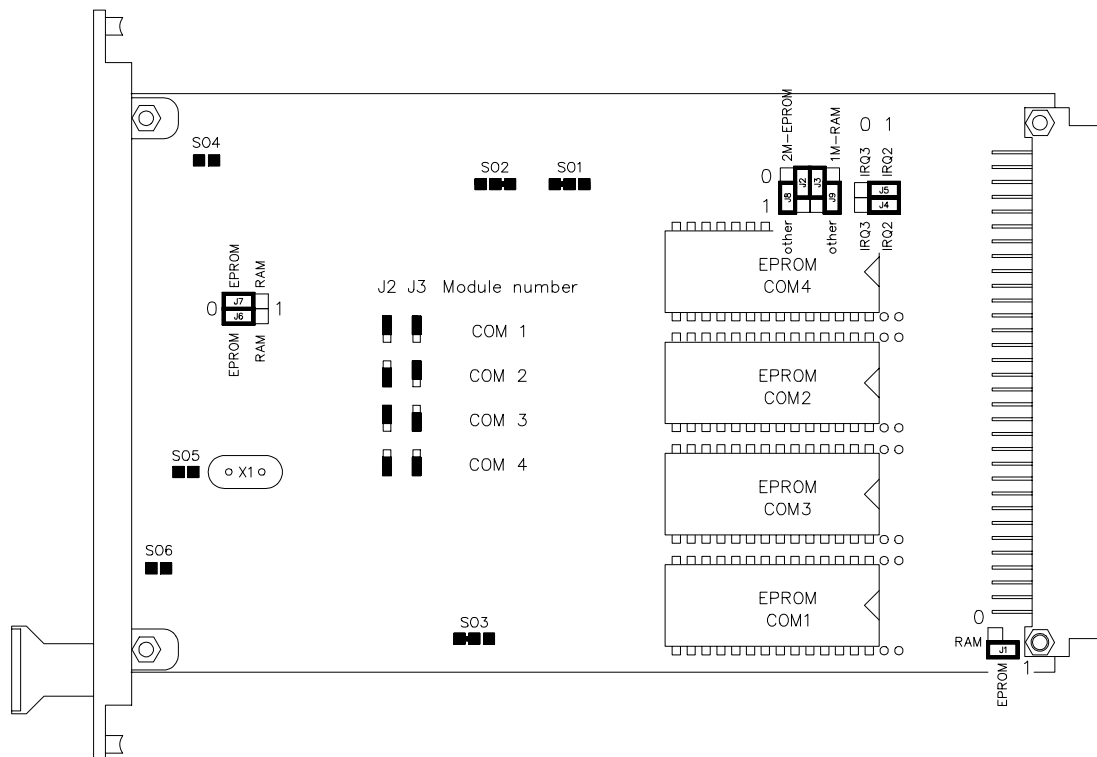


Figure 1 Jumpers and EPROM sockets on 10004/1/1 module

The COM module has its own processor and memory to relieve the central processor and to offer optimum support for the external equipment.



The extensive memory capacity of this module allows many special features to be included in the software, e.g.:

- communication protocols: – FSC-FSC  
– FSC-DS  
– ModBus RTU  
– ModBus H&B  
– RKE3964R
- sequence of event recording (SER),
- report generation, and
- support of printers and video display units.

The COM module is provided with battery back-up circuits for the RAM memory, which enables back-up supply from the batteries on the diagnostic and battery module (DBM, 10006/1/1 or 10006/2/.) or single bus driver (SBD, 10007/1/1).

38.4 Kbaud on COM channel A is only possible if oscillator X1 is placed and solder jumper SO6 closed (see Figure 1).

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## EPROM types

The 10002/A/1 module supports the following EPROM types:

- 27C512: 64 k \* 8 (512 Kb) or equivalent
- 27C1001: 128 k \* 8 (1 Mb) or equivalent
- 27C2001: 256 k \* 8 (2 Mb) or equivalent

The maximum access time for all EPROM types is 200 ns.

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## Type coding

If special interfaces are used, the type coding of the COM modules is as follows:

10004 / . / .  
└──┬── Letter of interface (B) bottom  
└──┬── Letter of interface (A) top

For example, 10004/H/F is a COM module with:

- Top interface: 10004/H/1
- Bottom interface: 10004/F/1

Empty interface positions are indicated with the number 1.

For details on the various interfaces refer to the 10004/. / 1 data sheets.

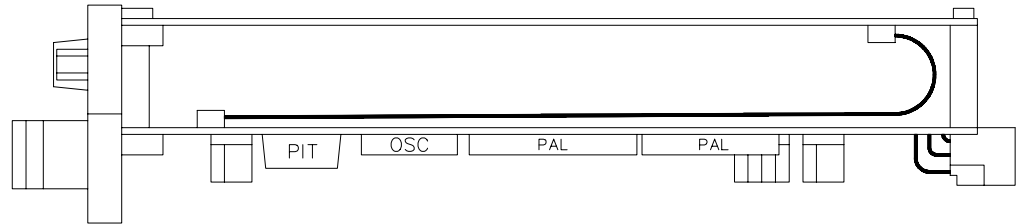


Figure 2 Top view of COM module with interface modules

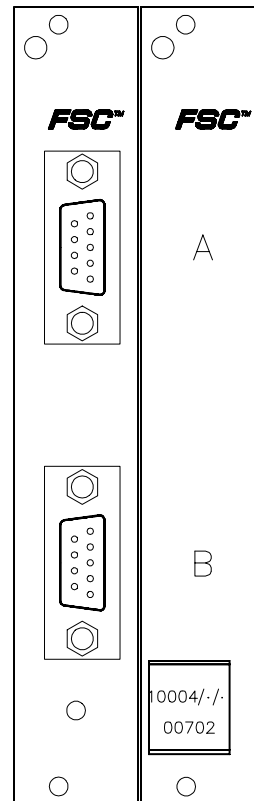


Figure 3 Front view of COM module with two interface modules