

Background information:

Case for the RS232 interface

Up to recently, technical standards were often adopted by companies that had a longer view and did not wish to follow every short-lived trend. Today, however, the situation is changed, as too many marketing experts have gotten the ear of standardization bodies and many solutions of dubious quality have been awarded with an internationally binding standard. Today self-confidence is in demand: There is no standards committee making the decision for those responsible in the electronics industry when it comes to deciding which interface will be fitted for example on test instruments, industrial controls etc.



Overview: RS232 interfaces

Allowing yourself to be talked into integrating not just RS232, RS485 and various field buses but also Ethernet, USB, Firewire and every new installation bus into your devices will likely require doubling the size of your development department, or else you will be neglecting the actual function of your devices.

This approach cannot be successful, as new interfaces do not attract new customers but simply respond to the market that has unfortunately diverted from a few reliable interfaces to a wealth of different more or less suitable solutions. A look back into the past reveals a few quite surprising facts: technicians agree that the RS232 has been proven as the most reliable interface in the past 20 years.

Even today, RS232 interfaces are supported in more equipment than any other port and have the largest number of independent suppliers. Most testing equipment, controls, etc. can be operated without any problems at today's standard data transfer rates and there is virtually no task that cannot be handled at the lowest level as regards complexity and costs with the RS232:



Cable interface USB <-> RS232

RS232 devices can be coupled with minimum effort directly to other RS232 components and to desktop PC as well as to [USB converters](#) on notebooks.

On the other hand, trouble-free connection of devices with USB port to the PC world is limited due to the lack of alternative drivers.

Converting an RS232 interface into other serial standards ([RS422](#), [423](#), [485](#), [20mA](#) and into all field busses) is very easy. [Fiber-optic cables](#) are closely related to RS232, and transition is therefore extremely simple.



Overview
Converter RS232 <-> Ethernet

By spending around EUR 250, access to the omnipresent [Ethernet](#) is also possible, if required. Even the unpopular RS232 special wiring is not necessary anymore, as every RS232 device can be connected to common network cables.

It might therefore be appropriate to see RS232 as base interface rather than as outdated technology. Both manufacturers and users need such a base, if they do not want to get lost in the chaos created by certain bodies. And the most obvious approach is thereby to stick to the known and existing interface type that is widely accepted, namely RS232. This solution is universally applied, there are no conversion issues and the cost are very low, provided that every device is equipped with this interface, as has been the case in the past.

With small and cheap adapters, any RS232 device [can be connected directly to](#) networks. RS232 should therefore always be included as a cost-effective standard option, while the network adapter (be it external or on-board) should be available as an optional auxiliary.



Overview: Fiber optic interfaces

We strongly support the view that manufacturers and users should not let themselves be confused and be led to panic investments into new interfaces.

Only as long as SMEs act together, providing the market with a common established data interface, they will be able to survive and offer customers the wide range of possible applications and suppliers that they need. Only with this strategy will we be able to finance our efforts to continuously improve your products.

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