How to find the best remote control interface for your application?

1. What series is your device from?
   - PSI 9000
   - ELR 9000
   - EL 9000 B
   - PSE 9000
   - PSB 9000

2. Need long distance?
   - yes
   - no

3. Industrial grade?
   - yes
   - no

4. Automation with field bus?
   - yes
   - no

5. Custom software planned?
   - yes
   - no

6. Full PIC support with process data?
   - yes
   - no

7. Modbus TCP protocol required?
   - yes
   - no

8. Already GPIB present?
   - yes
   - no

9. Full PLC support with process data?
   - yes
   - no

10. Already GPIB present?
    - yes
    - no

Interface options:
- Profinet IO
- Modbus TCP
- Ethernet
- RS232
- Profibus
- CAN CANopen
- GPIB
- USB
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<tr>
<th>Interface</th>
<th>Spec</th>
<th>Pro</th>
<th>Contra</th>
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Digital communication topologies

**Bus**

- **Pro:**
  - Separate communication channels realisable
  - Short cables
  - Broadcast messages (one command to all bus members) possible

- **Contra:**
  - If the connection from the PC to the first units is interrupted, all other units are offline as well

- **Typical area of use:**
  - Parallel connection of multiple identical models

- **Which of our interfaces use a bus connection:**
  - CAN, CANopen, Profinbus, GPIB

**Point-to-point**

- **Pro:**
  - Every target device has its separate communication line

- **Contra:**
  - Much cabling required, one line for every device

- **Typical area of use:**
  - Connection to only one device or a few devices or situations where it is required to change the setup very often
  - Laboratory and on-desk test applications

- **Which of our interfaces use a point-to-point connection:**
  - USB, RS232

**Network**

- **Pro:**
  - Very long distances
  - Many devices easily integrateable
  - Low costs

- **Contra:**
  - Very much cabling
  - Communication and reliability is very much depending on network hardware like switches or patch panels

- **Typical area of use:**
  - Parallel connection of multiple identical models or test applications of single devices with direct connection to PC or local network switch

- **Which of our interfaces use a network connection:**
  - Ethernet, Profinet IO, ModBus TCP

*Note:* Ethernet interfaces with 2 port incorporate a network switch and can turn a network line into a bus with open end or, for higher dropout safety, into a ring. No matter how many devices are connected in that bus/ring, at the point where they are connected to the network, it requires a max. of two ports on a higher level switch.