



# micro buffer

- **Line powered.** The MicroBuffer is line powered and requires no external power supplies. It can even get enough power from the line it is logging.
- **Non-volatile storage.** High capacity, 1Mbyte, data storage with 10-year data retention without batteries.
- **Sophisticated Autobauding.** Simplifies installation and will maintain synchronisation with the data source even if the output speed or format changes.
- **Auto-pin detection.** The data will be logged from either pin 2 or pin 3. Standard straight-through RS232 cables can generally be used.
- **Setup & Diagnostics.** Simple terminal commands to setup and return diagnostic information.

The MicroBuffer is a compact, ultra-low power, RS232 buffer that automatically detects the pin out and communications format of the data source. The MicroBuffer is line-powered and provides 1Mbyte of non-volatile flash storage. It is designed to present a normalised interface to the host computer — greatly simplifying installation and maintenance.

## data collection

### Automatic Configuration

- Works with any standard RS232 compliant device
- Detects pin 2 or 3 for received data
- Obtains correct baud rate to match sending device
- Works out correct protocol from the data stream
- Maintains correct baud and protocol even if data source changes

### Choice of Format

- Binary mode returns full 8 bit data
- ASCII mode returns 7 bit data

### Circular Memory

- When completely full, new data will overwrite old data. The newest 1Mbyte of data is kept.

## operating modes

### Hardware Flow Mode

- Sends data while both CTS & DTR remain asserted
- Bi-directional communication with data source

### Xon/Xoff (Hardware/Software Flow Mode)

- Sends data while both CTS & DTR remain asserted, and the XON character is sent to the MicroBuffer.

### Timed Xon/Xoff

- Sends data while both CTS & DTR remain asserted, and an Xon is sent to the MicroBuffer at least every 15s.

### Ymodem

- Standard Ymodem error correction protocol for use with an external modem. The MicroBuffer also sends a setup string to the modem every 5 minutes (Reset + Auto Answer after 2 rings).

## applications

### Provide Resilience

- Buffering the data allows the connected computer to be rebooted or upgraded and minimise data loss

### “Post and Forget” Distribution

- Using the MicroBuffer with your application will allow simple installation for your customer. They can connect the MicroBuffer with standard cables and not worry about DCE/DTE, baud rates, or protocols.

### Remote Logging

- Low cost remote data logging with an external modem.
- Central site dials the MicroBuffer

## specifications

**Data Source Port** RS232/V24, 9-pin plug - data input on pins 2 or 3  
Output pin resolves according to input detection  
Baud: 300 - 19200 baud  
Data: 7-bit Odd/Even/None, 8 bit Odd/Even/None  
Full autobauding and parity detection within this range.  
Capture pure binary or 7-bit ASCII

**Computer Port** RS232/V24, 9-pin socket  
9600, 19200, 57600 baud, 8-bit, no parity

**Memory** 1Mbyte Flash - 10 year data hold-up

**Power Supply** None required!

**LED** Blinks rapidly as data arrives, flashes if data stored in memory

**Physical** Temperature: 5-55°C (40-130°F)  
Humidity: 20-80% R.H. (non condensing)  
Dimension: 85 x 55 x 19mm  
3.3" x 2.2" x 0.75" (LxWxH)  
Weight: 55g  
1.9oz

**Certifications** CE Class B (EN55022, EN55024)  
FCC Rules CFR 47 Part 15 Limit A  
AS/NZS 3548 Class A