

# Paper Handling Sensor with Bluetooth and CANBus Network Communications

## Design Note #46



Portable sensing technology from Orchid makes high speed paper handling reliable, accurate, and cost effective.



“High speed paper handling requires repeatable precision roller adjustment. Orchid’s innovative sensor sets a new standard.”

- Marketing Manager

### Paper Handling Sensor Application

The processing of paper at high speed requires precision and repeatability. Today’s modern paper processing equipment processes paper at the rate of many hundred linear feet per second. Accurate and repeatable positioning of the paper handling equipment is vital to product quality. Orchid developed a multi-position sensing system which measures equipment operation in real time.

### CANBus Network Communications

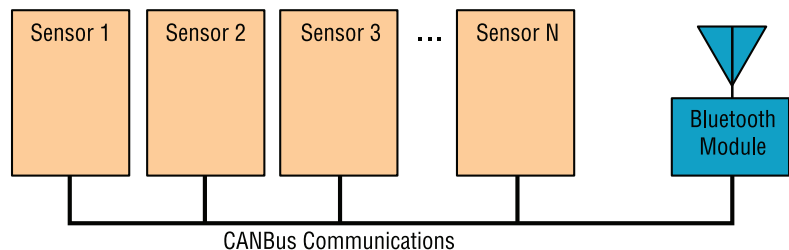
Multiple distributed sensor modules communicate to a single base station over a common CANBus wired interface. Over 1000 individual nodes can be supported using the CANBus Protocol. CANBus provides high levels of reliability at both the physical link-level and at the data transport levels of network communications. CANBus makes our distributed data collection system robust even in conditions of high electrical noise and interference.

### Bluetooth Radio Communications

Bluetooth communications connects the sensor base station to a single data collection computer. Bluetooth communications provides a low cost, low power means by which large amounts of data may be communicated either in a point to point or point to multi-point fashion. Bluetooth communications also removes the traditional wired link between sensor and host. High degrees of ground isolation and electrical safety are achieved using Bluetooth communications protocols.

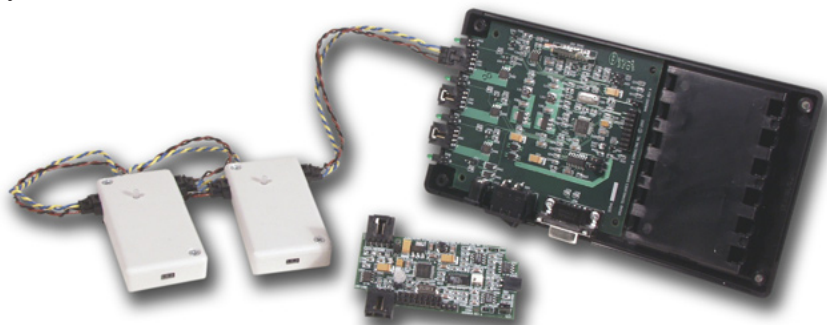
### Distributed Communications

Hundreds of Sensors Communicate with high reliability over CANBus and Bluetooth Networks.



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