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## FEATURES

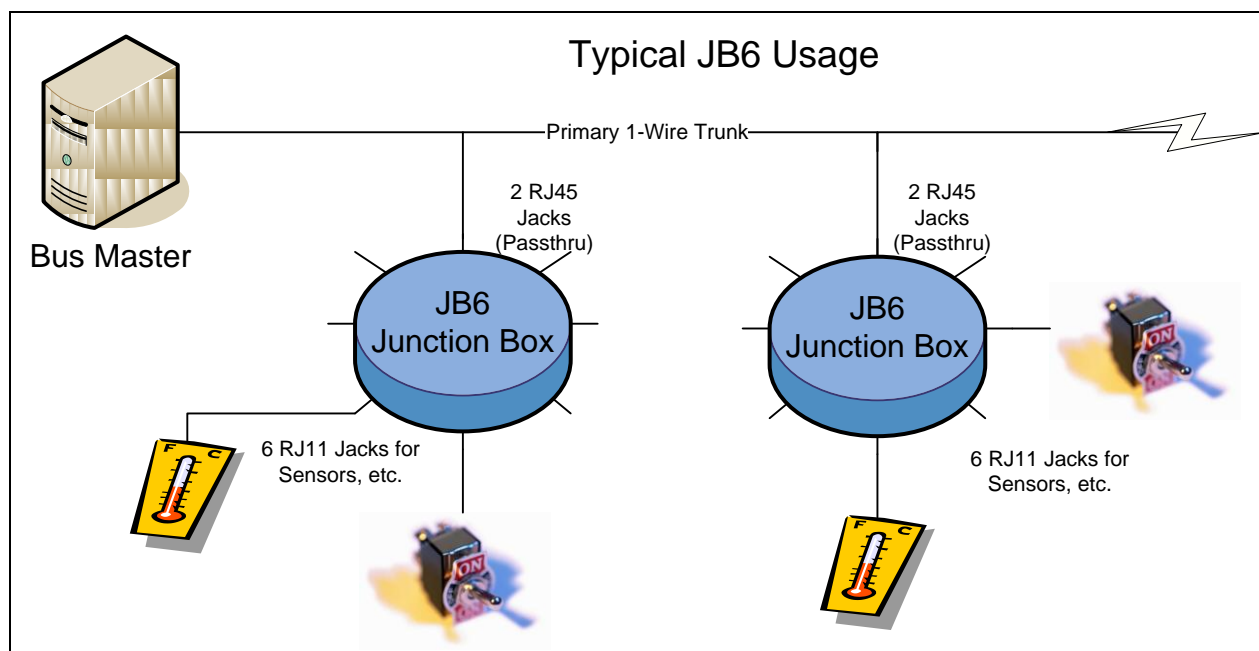
- Provides six 1-Wire branches, each with individual impedance matching components.
- RJ11 jacks for stub 1-Wire branches.
- RJ45 pass thru jacks for the main 1-Wire trunk.
- Auxiliary power may be bussed from the main trunk to each branch.
- Red LED indicates 1-Wire activity.
- Operating Temperature Range from -67°F to +257°F (-55°C to +125°C).

## DESCRIPTION

The JB6 junction box is designed to simplify the installation of 1-Wire networks configured in a star / distributed star topology.

### *Reduce Installation Time*

By providing six convenient RJ11 jacks for the connection of sensors / actuators, the JB6 can reduce your on-site installation and maintenance time. Adding or removing a device to the 1-Wire bus is as simple as plugging it in to one of the RJ11 jacks.



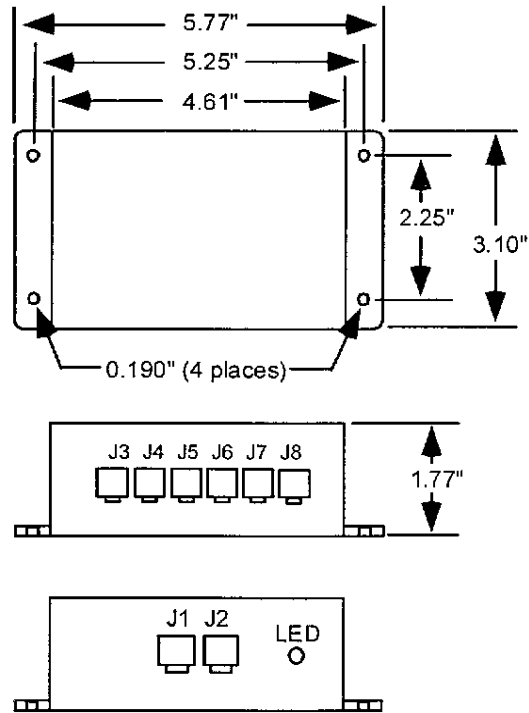
### *Star Topology Support*

The JB6 is designed with two RJ45 jacks that are intended for connection to the main 1-Wire trunk. By providing two jacks, the 1-Wire trunk can be conveniently daisy chained from one JB6 to the next.

### *Distributed Impedance Matching*

When a branch is connected to a 1-Wire bus, an impedance mismatch is created at the point where the branch is connected. Signal reflections from the end of the branch can return to the main trunk and cause problems for other devices on the network. The JB6 contains circuitry that reduces the impedance mismatch at each branch, and also reduces the amplitude of the reflected energy. This helps to significantly reduce the amount of branch generated reflections that reach the main trunk. For a complete discussion of 1-Wire network topologies and issues, please refer to the Dallas Semiconductor app note # 148 available at <http://DalSemi.com/>.

**Drawing of JB-6**



Pin outs for J1 and J2

Pin 4	1-Wire Data
Pin 5	Ground
Pin 7	Ground
Pin 8	V-In (+5V dc)

Pin outs for J3 to J8

Pin 2	Ground
Pin 3	1-Wire Data
Pin 4	Ground
Pin 6	V-Out (+5V dc)