

## Integrating 3300 Monitoring Systems to System 1® Software

### New Embedded Communications Processor Makes Connectivity Easier Than Ever

#### Announcing the 3300/02 TDe System Monitor

Bentley Nevada is pleased to announce a new communications processor specifically designed to allow easier connectivity of existing 3300 Series Monitoring Systems to System 1 software. Our new 3300/02 Transient Data embedded (TDe) System Monitor module contains a full-featured internally mounted version of our powerful TDXnet™ external communications processor. Its design requires no external hardware, wiring, or mounting space – simply replace the existing 3300/03 System Monitor in your rack with the new 3300/02 TDe.



#### 3300 Monitoring System – Alive and Well

Many customers have asked us whether the 3300 Monitoring System is an “obsolete” product. Our response is that while the 3500 System is recommended for all new installations and represents increased functionality and value, the 3300 product line remains fully supported, even as it passes its sixteenth birthday. Why? Very simply, 3300 remains a viable, reliable machinery protection system with worldwide acceptance. Globally, 3300 monitoring systems number in the tens of thousands, and we have a strong commitment to support our customers rather than institute a forced obsolescence program. Our customers, and Bentley Nevada, believe that installed 3300 systems continue to be fit-for-service and there is no compelling reason to upgrade these systems unless the functionality of one of our newer monitoring systems, such as 1701 or 3500, is required. In order to help our customers continue to realize high value from their installed 3300 systems, we have

introduced the 3300/02 TDe System Monitor, allowing 3300 systems to more easily connect to System 1® software.

Certainly, in some cases, we are unable to support older products because the electronic components are no longer obtainable from our suppliers. However, in these instances, we plan ahead and communicate with our customers well in advance, generally providing five or more years of advance notification regarding “retirement” of a product line.

We thank you for your overwhelming confidence in the 3300 product line over the years, as evidenced by its exceptionally large installed base. We will continue to stand behind these systems with the service and support you have come to expect from Bentley Nevada, continuing our heritage of *taking excellent care of our customers.* ☺

Connecting your existing 3300 racks to System 1 software is, in most instances, now as easy as 1-2-3:

- 1 Power-down the rack, slide out your existing 3300/03 system monitor module, slide in the new 3300/02 TDe module, and repower the rack
- 2 Run an Ethernet cable to the 3300 rack(s) and connect to a System 1 host computer
- 3 Configure System 1 software and start using your new condition monitoring capabilities

### You Spoke, We Listened

While the 3500 Monitoring System is today's flagship offering, there are hundreds of thousands of 3300 channels still used in widespread applications around the world, providing reliable service and with significant useful life remaining. With the introduction of the System 1 platform to replace earlier generations of condition monitoring software, a frequent customer request has been an easier and more cost-effective interface to System 1 for their installed 3300 Systems. Our answer? The new 3300/02 TDe.

### Zero Footprint, Zero Hassle

A communication processor digitally samples and captures the high-speed vibration and condition data within the monitoring system under a variety of user-configurable states such as alarm conditions, changes in machine rotative speed, and changes in time. It temporarily buffers this data, formats it appropriately, and then provides it to the

condition monitoring software where it can be viewed, analyzed, manipulated, trended, and archived.

The extensive computational horsepower to provide such functionality has historically required a separate externally mounted box, roughly the same size as the underlying monitoring system. However, dramatic advances in digital signal processing technology over the last few years have allowed us to shrink the size of our communications processors, eliminating the need for an external module and instead embedding these capabilities *inside* the existing monitoring rack, requiring only the replacement of a single module.

### Scalable Pricing and Configuration

The 3300/02 TDe System Monitor can provide static, steady-state, and/or transient data collection capabilities. Pricing is a function of the number of channels

### No Ethernet? No Problem.

As we consulted customers regarding the new 3300/02 module and ways that we could make it retrofit-friendly, several told us that pulling Ethernet cable out to their existing 3300 racks would be difficult – if not downright impossible. New installations can, of course, easily pull this cable during the construction phase, but existing installations face a more difficult challenge.

Because customers almost always have one or more spare twisted-pair cables available between their cabinets (where the 3300 rack is mounted) and a control room (where network connections are located), available physical wiring often *does* exist – but not Ethernet cable. Fortunately, Bently Nevada offers an innovative, pre-engineered media converter solution that allows this network connection to be carried over a standard twisted-pair cable, and then converted back to conventional Ethernet cable once in the control room. The result is reliable, hardwired network connectivity, without the inconvenience and cost of pulling new wires. ☺



from which data will be collected and the type of data collected from each channel. You pay only for what you need, allowing a scalable and affordable solution that is tailored to your application.


### Compatibility

The new 3300/02 TDe System Monitor module is compatible with 3300 racks manufactured since 1992 with an enhanced-style backplane. Your local Bently Nevada sales professional can assist you in establishing the compatibility of your specific 3300 racks and monitoring modules. You can also find compatibility information on our website at [www.bently.com](http://www.bently.com).

Those customers with an existing serial data interface connection between their 3300/03 System Monitor module and a process control system (such as a DCS) can use the same cabling to connect to the 3300/02 TDe module. No reprogramming or cabling changes are necessary<sup>1</sup>.

System 1 software version 5.0 or later<sup>2</sup> is required for communication with 3300/02 TDe-equipped racks.

### Extended Support

Many 3300 Systems were commissioned years ago and are well beyond their original warranty. However, you can combine the installation of a 3300/02 TDe System Monitor with optional extended warranty coverage for your racks. At the same time a Bently Nevada service engineer installs your 3300/02, he can also ensure the rest of your 3300 rack is operating within specifications and provide you with an extended 3-year warranty for the entire<sup>3</sup> 3300 rack, not just the 3300/02 module. 

1. If the connection from the 3300 rack to the DCS uses RS-232 communications, customers will need to unplug this cable and move it to an adjacent serial port (less than 50 mm away) on the back of the 3300 rack. Customers using RS-422 communications do not need to move the cable.
2. System 1 software version 5.0 shipped prior to July 2004 requires a downloadable upgrade for 3300/02 TDe compatibility.
3. A very small percentage of 3300 module types are no longer produced and are not available for extended warranty provisions. Contact your Bently Nevada sales professional for additional information on specific 3300 module types affected.