



**For immediate release:**

**GUILDLINE INSTRUMENTS LIMITED INTRODUCES NEW SERIES OF  
DIRECT CURRENT COMPARATOR (DCC) BRIDGES**

**Smiths Falls, Ontario** – September 2006. Guildline Instruments Limited is launching the 6622A Series, a new family of Direct Current Comparator (DCC) Bridges designed for resistance and thermometry applications. Guildline is the original manufacturer of DCC Bridges and has delivered over 1000 DCC Bridges to customers, more than any other company in the world.

With the customers' needs in mind, the Guildline engineering team has delivered a new, innovative series of bridges on a **ONE BRIDGE Solution** Platform. There are five different models in the 6622A series, each with different measurement ranges and accuracy. All bridges incorporate the same base hardware, firmware and software and are completely upgradeable from model to model to protect customer investments. The five models in this series are:

- ✦ Model 6622A, low cost Base model, providing a measurement range from  $1\text{m}\Omega \sim 100\text{k}\Omega$  with a best measurement uncertainty of 0.1 ppm
- ✦ Model 6622A-XR, low cost **eXtended R**ange model, with a measurement range from  $1\text{m}\Omega \sim 100\text{M}\Omega$  and a best uncertainty of 0.1 ppm
- ✦ Model 6622A-XP, the **eXtended P**erformance model, with a measurement range from  $1\text{m}\Omega \sim 100\text{k}\Omega$  and a best uncertainty of 0.05 ppm
- ✦ Model 6622A-XPR, the **eXtended P**erformance and **R**ange model, with a measurement range from  $1\text{m}\Omega \sim 100\text{M}\Omega$  and a best uncertainty of 0.05 ppm

- ✦ Model 6622A-HV, is the top-tier offering, providing **H**igh **V**oltage and with an extended measurement range from  $1\text{m}\Omega \sim 1\text{G}\Omega$  and a best uncertainty of 0.04 ppm.

Innovation, commonality, and capability are key features of the 6622A Series design. The 6622A series has features that metrologists are used to, as well as many new benefits. Most noticeable is the introduction of the 100:1 measurement ratio. The old generation of DCC bridges have a max measurement ratio of 13:1. With the new 100:1 ratio, a Guildline 6622A user has more choice in reference standards, needs fewer reference standards, can reduce the measurement uncertainties when laddering up/down, and can easily verify the bridge performance without the need for a Hamon type transfer standard.

A new 3A Range Extender option is available for all models in the 6622A Series. This range extender has a built-in 3A current source and can be installed internally to any 6622A model to allow highly accurate measurements down at the  $1\text{ m}\Omega$  level.

External range extenders can further expand the bridge measurement range down to  $0.1\mu\Omega$ , at a maximum current of 4200A. The best part is that the range extender is also modular in design, allowing users to buy or upgrade in 150A increments and will require no external switches, power supplies or compressed air.

Also available is a Temperature “T” option for direct temperature measurements on any of the bridges. This option can be added as budget and workload requirements demand and allows the 6622A Series to truly operate for a wide variety of workloads.

The 6622A series of Bridges are built using a common platform and each model is upgradeable. This provides Guildline customers with the flexibility to meet current needs and as well as future growth. For example, a base model can be upgraded to an eXtended Range model (the 6622A-XR) if the users need a wider measurement range to  $100\text{M}\Omega$  instead of  $100\text{k}\Omega$ ; the base model can be upgraded to an eXtended Performance model (6622A-XP) if

the user needs 0.05 ppm of uncertainty instead of 0.1 ppm; or the base model can be upgraded to a better performance and wider range model, either the 6622A-XPR or the 6622A-HV.

Many customers need a wide measurement range from  $1\text{m}\Omega \sim 100\text{M}\Omega$  (or  $1\text{G}\Omega$ ). The Guildline model 6622A-XR, 6622A-XPR and 6622A-HV are designed to offer these customers a simple, straightforward **ONE BRIDGE Solution**. One Guildline Bridge can be initially purchased, or upgraded, to provide the entire measurement range.

‘Our **ONE BRIDGE Solution** with the upgrade options offers customers the ultimate flexibility. For customers who need to measure to  $100\text{M}\Omega$  or to  $1\text{G}\Omega$ , we offer one single instrument to cover the complete range of interest. This **ONE BRIDGE Solution** translates to lower initial capital spending, lower annual maintenance cost since there is only one piece of instrument to calibrate, smaller foot print, and higher reliability. I am truly proud of the Guildline tradition of supplying outstanding metrology solutions’, states Mr. Richard Timmons, President of Guildline Instruments Limited.

About Guildline Instruments Limited. Formed in 1957 and located in Smiths Falls, Ontario, Guildline is recognized as one of the world’s best manufacturers of precision metrology solutions. Guildline products include precision resistance and temperature measurement standards, instruments and systems, and salinometers used for Oceanography research. The Company has been in business for 50 years and has a worldwide reputation of producing highly accurate, highly reliable instruments. For further information, US customers please contact Guildline Instruments Limited USA, email: [sales@guildlineUSA.com](mailto:sales@guildlineUSA.com) or phone (352) 589-4556; International customers please contact the head office of Guildline Instruments Limited, email: [sales@guildline.com](mailto:sales@guildline.com) or phone 1-613-283-3000.