

# DECS-450

## Digital Excitation Control System

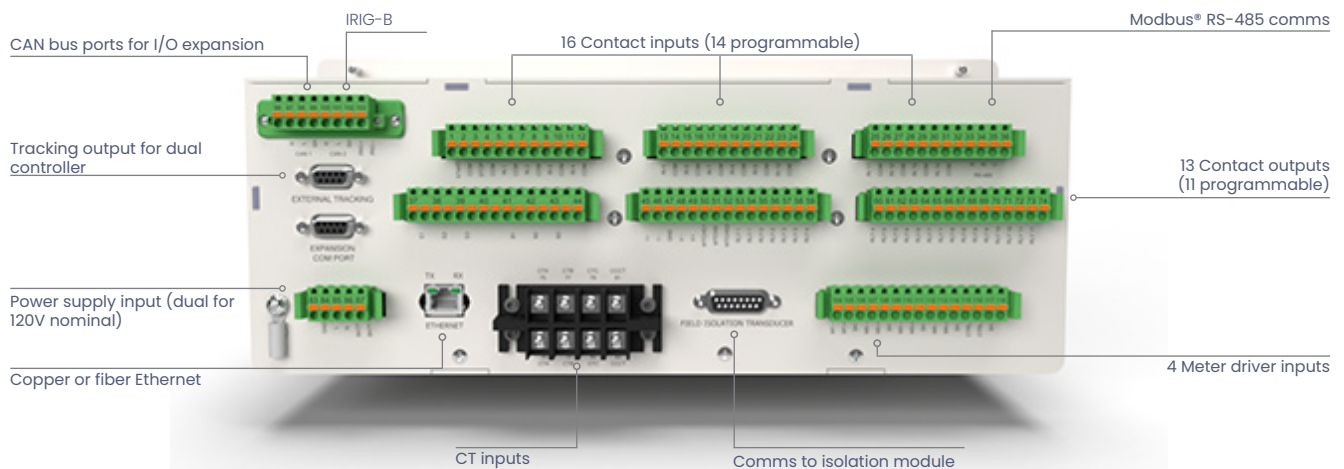
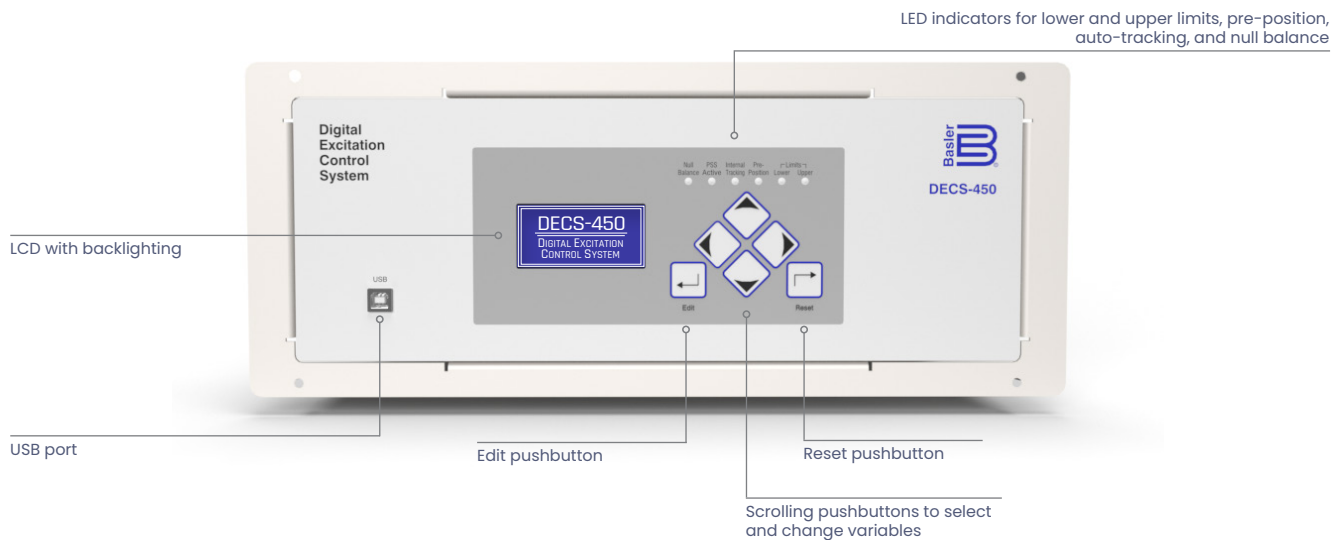


The latest innovation in Basler's extensive line of integrated excitation systems

- Enhanced voltage regulation accuracy at 0.10%
- Five modes of excitation control
- Powerful industry leading BESTCOMSPlus® PC Software
- Integrated programmable logic
- Integrated auto synchronizer with voltage matching
- Automatic PID selection via our Auto tuning function
- Enhanced communication capabilities
- High-end generator and motor protection schemes
- Configurable protection to allow for easy development of other protection elements
- Load Sharing via Ethernet communications

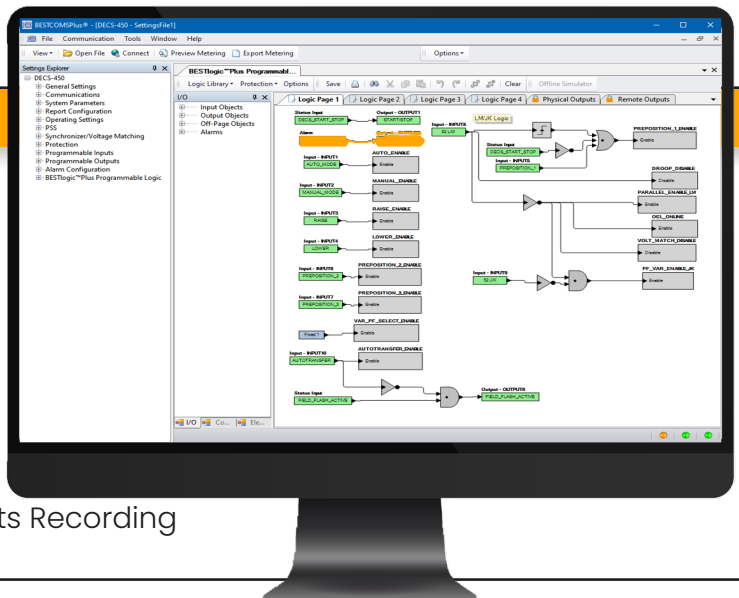
# DECS-450

## Excitation Control System - Product Overview



### BESTCOMSPlus® Software

- Latest Basler PC software format
- Enhanced metering
- Faster, more intuitive setup
- Programmable logic
- Configurable Protection
- Remote I/O configurations
- Auto tuning software
- Sophisticated Data Logging and Sequence of Events Recording with IRIG-B Time Stamps



# DECS-450

## Excitation Control System - Applications

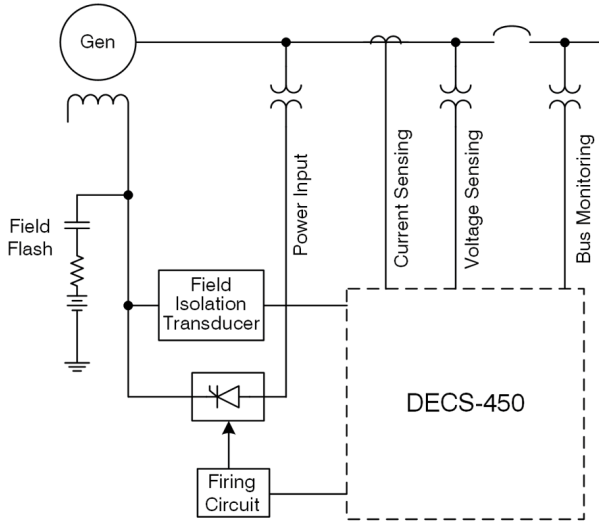


Figure 1 - DECS-450 Main Field Application



## Applications

### Power Generation

Regardless of the type of power generation you have, Steam, Hydro, or Gas Turbine, the DECS-450 provides solutions for your application concerns. It offers high accuracy, reliability, sophisticated protection, programmable logic, and configurable protection to easily and completely adapt to your situation.

### Synchronous Motor

Synchronous motor applications are no problem with the DECS-450. A simple click of a button configures the DECS-450's operation, metering and protection to address the unique requirements of a synchronous motor application. Basler has been providing synchronous motor excitation systems for 50+ years and brings a wealth of application knowledge.

### Pumped Storage

With our configurable protection, programmable logic, multiple settings groups and on-the-fly selectability, Basler offers the perfect solution for the demanding needs of Pumped Storage applications.

### Retrofit Applications

Basler Electric has a long history of replacing legacy excitation systems made by Basler and other manufacturers. We can offer complete excitation system replacements including power stages as well as "front end" replacements of only the control sections with modern microprocessor-based systems that provide all of the advanced functionality of today's excitation system without a total "rip and replace" approach to the upgrade.

### The following Excitation System Application Notes are available:

*Implement any Logic Scheme Confidently with Basler Offline Logic Simulator*

*Basler Offers Integrated Retrofit Packages for Gas Turbines*

*Phase Plot Compensator - A New Tuning Aid for Power System Stabilizer Implementation*

*Modernizing DC Rotating Exciters with Static Excitation Systems*

# DECS-450

## Excitation Control System - *Latest Innovation*

### Backward Compatibility

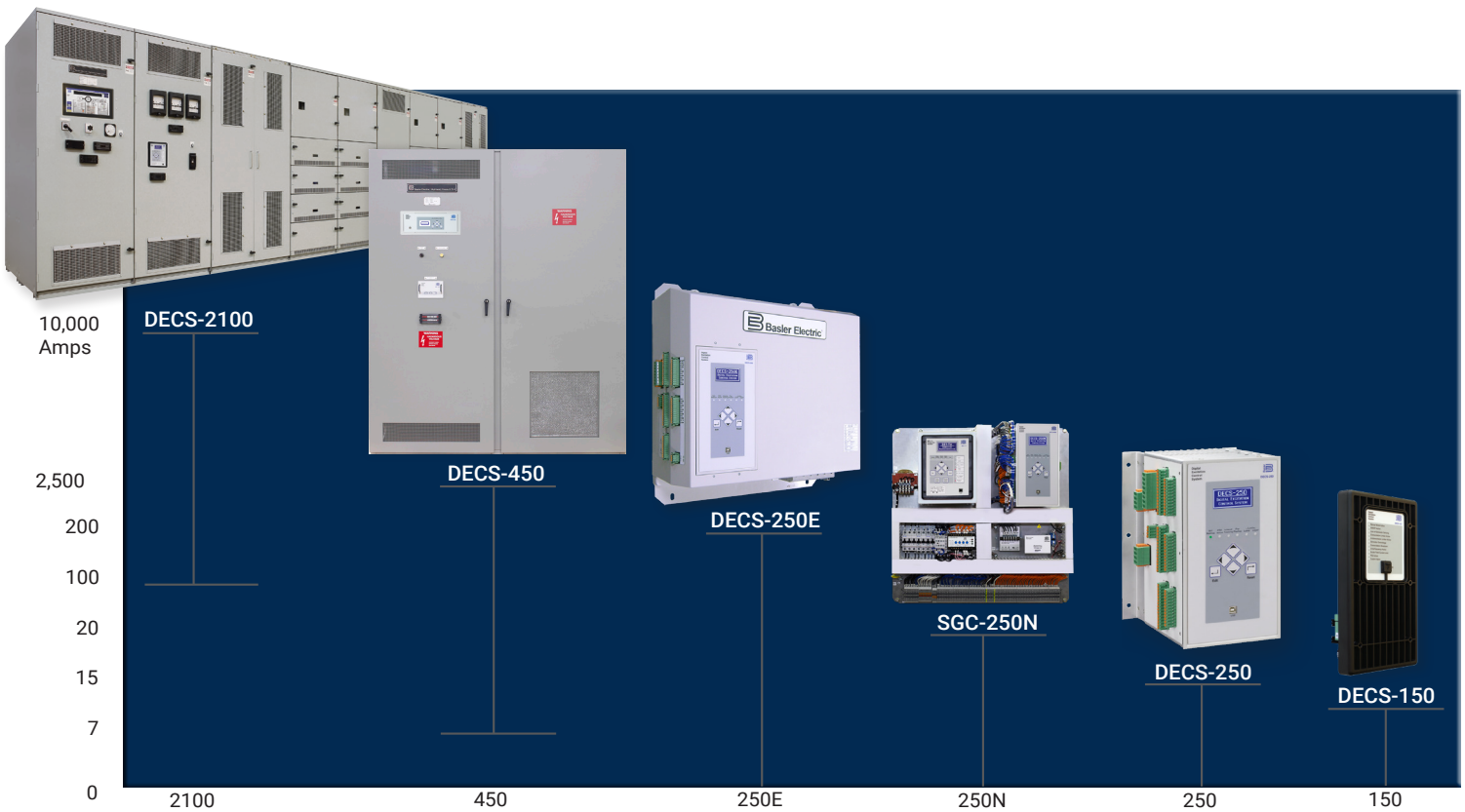
Basler implements product strategies that avoid forced obsolescence. With our new innovations, we look at the existing products and make them as backward compatible as possible to make the transition to the new products simple and easy.

The DECS-450 is backward compatible with the DECS-400:

- The DECS-450 fits in the same mounting cutouts and holes as the DECS-400
- The DECS-450 has a transition plate attachment that allows the use of the existing wire harness
- The DECS-450 BESTCOMSPi<sup>us</sup>® has a program that easily converts the PID and Gain settings of the DECS-400 into those usable by the DECS-450

Basler also provides technical support indefinitely. As long as components are available, we will provide our customers with repair services. Our Technical Support experts are available anytime by phone or email to provide solutions.

### Complete Excitation Line



### Custom Solutions

For over 77 years customers have relied on Basler to deliver innovative, technologically advanced products and we've done it again. The DECS-450 is the latest advancement in the excitation system market. It incorporates all of Basler's experience and innovations in this field to make the DECS-450 the new standard in excitation control.

Visit [www.basler.com](http://www.basler.com) to learn how the DECS-450 can solve your most challenging excitation system issues.