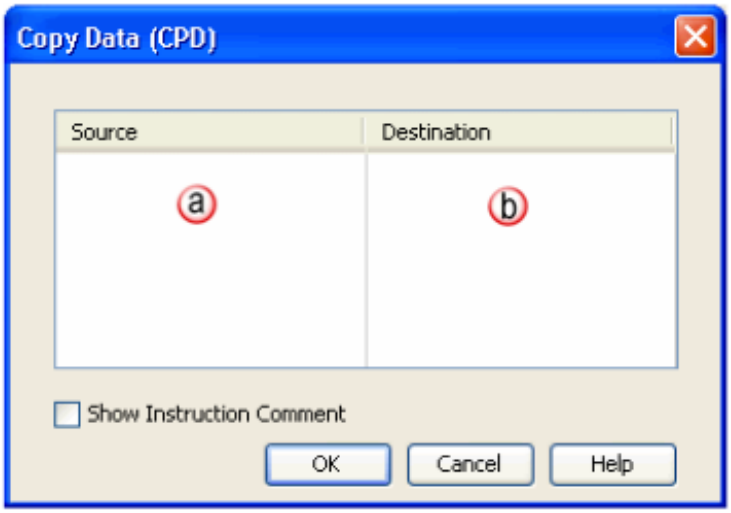
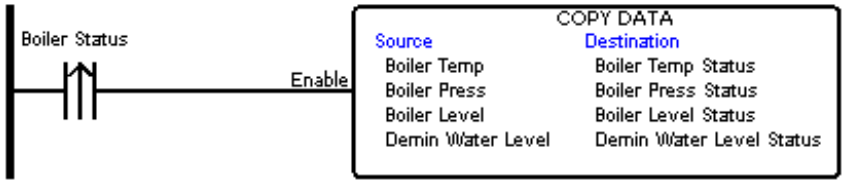
September 29, 2010

Copy Data (CPD)

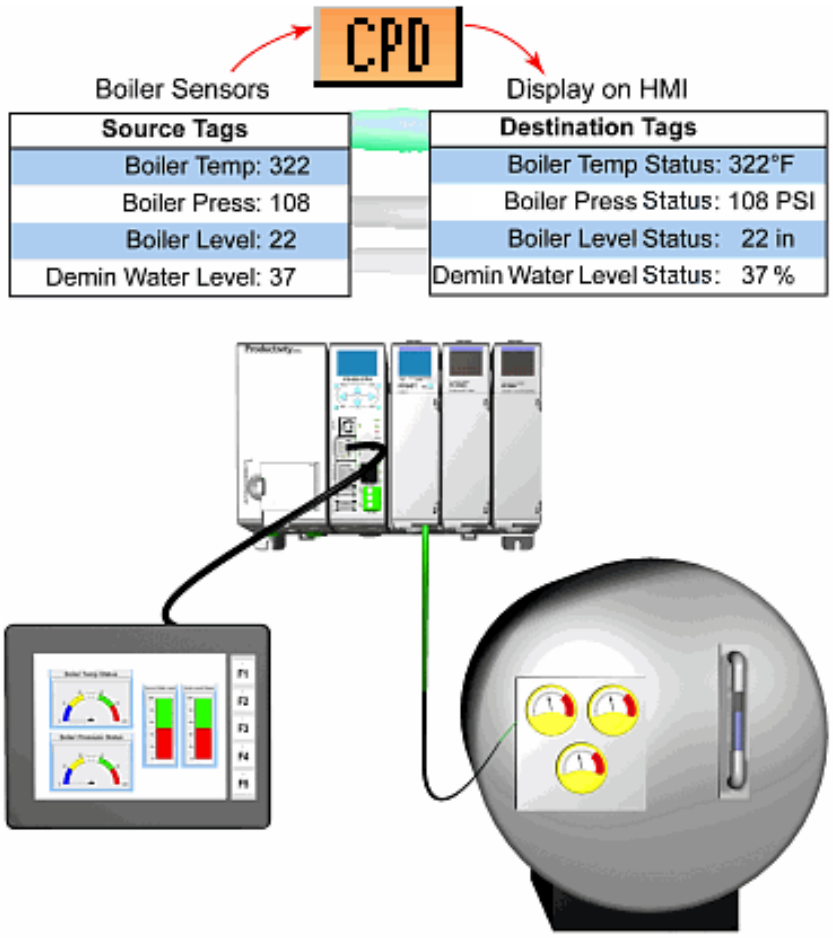
The Copy Data instruction block provides a convenient way to copy information from one tag to another. This can be useful for duplicating data while maintaining an organized tag database. You can also use this instruction to convert data types. Just enter the source tag name or constant into the left column and the destination tag in the right column.





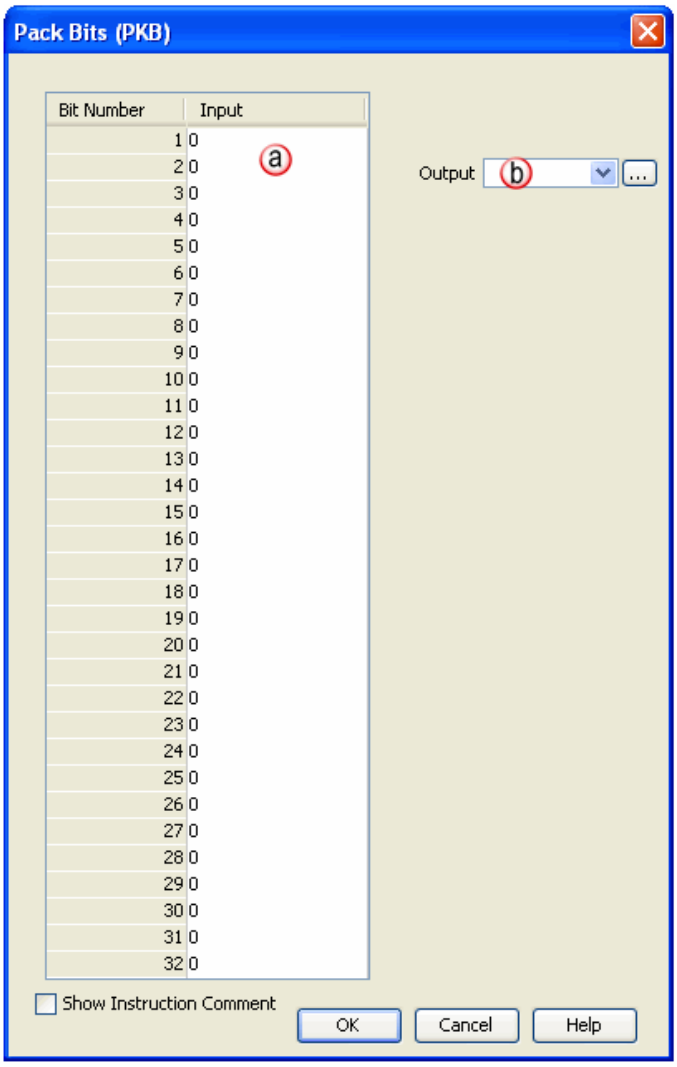
Application Example

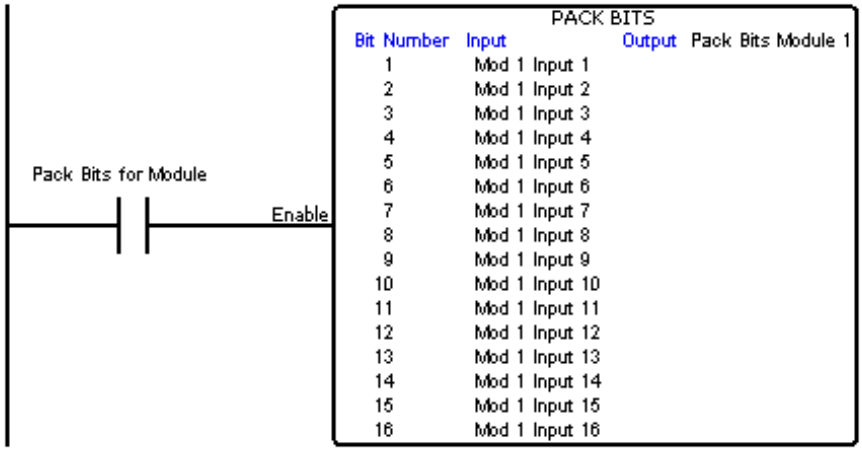
In the following example, the system is **Copying Data** from critical parameters of a boiler system and storing them in **Tags** that can be used for display in an **HMI** or stored to a **Database**.



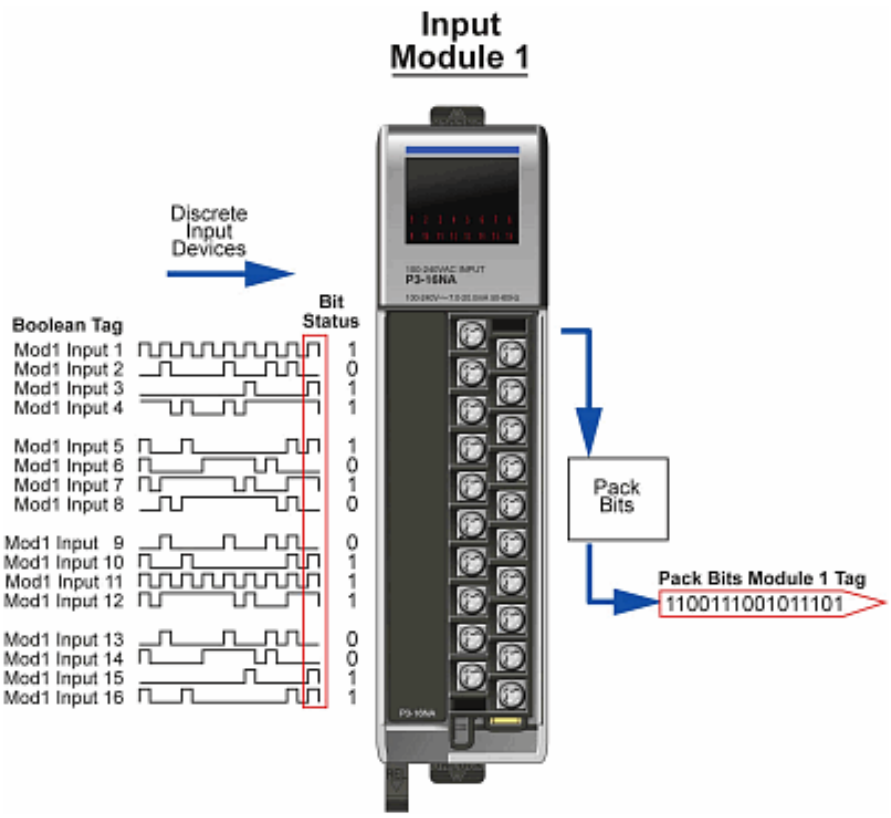
Pack Bits (PKB)

The Pack Bits instruction block is useful for combining multiple boolean or constant bits into one tag. You just enter the source tag or bit status into the input column and define the output tag you wish to use. It can be an 8, 16, or 32 bit signed or unsigned integer.



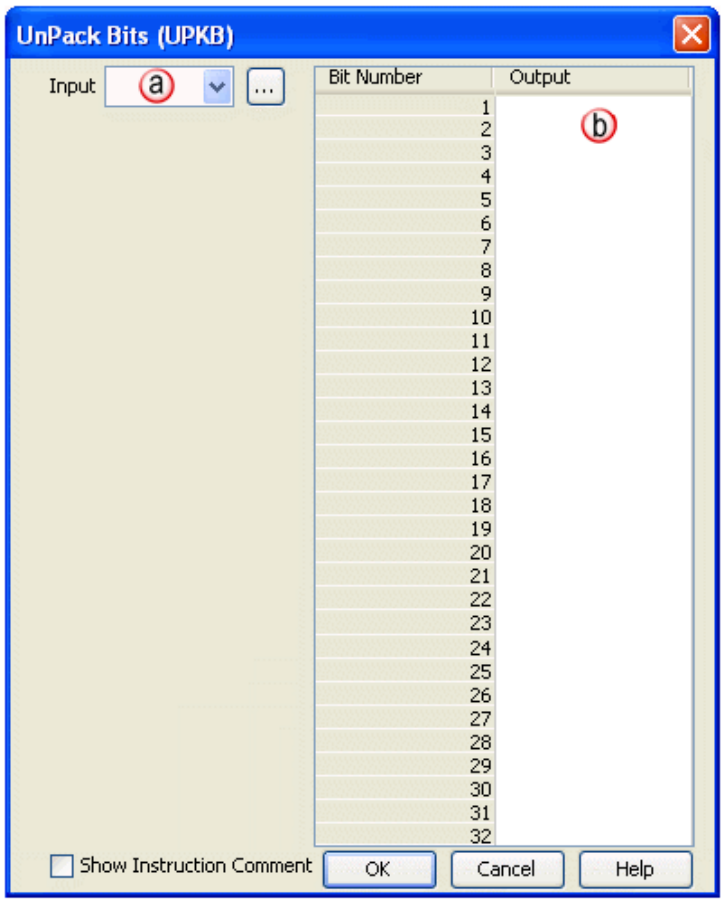


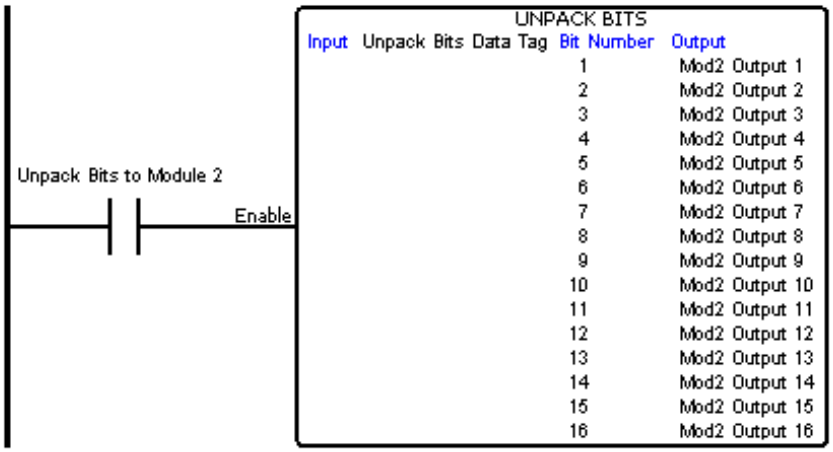
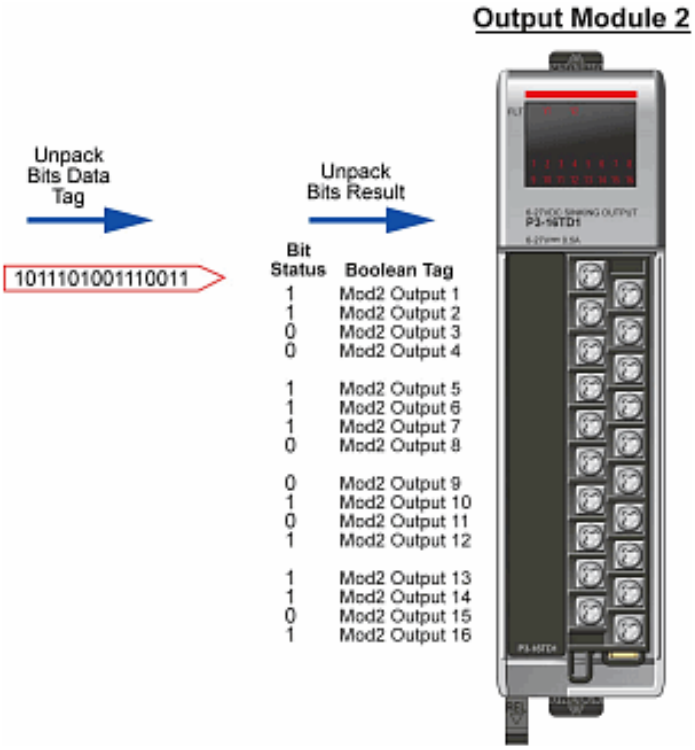
Application Example In the following example, the discrete **Input Boolean Tag Bits** are being **Packed** into a **16 Bit Tag** representing the **Inputs** for **Module 1**.



UnPack Bits (UPKB)

As the name suggests, the UnPack Bits instruction does the exact opposite of the Pack Bits instruction block. Enter any 8, 16, or 32 bit integer tag into the Input box. Then specify up to 32 output tags for each corresponding bit.





Application Example In the following example, a **16 Bit Tag** is being **Unpacked** into **16 Boolean Tags** of **Output Module 2**.