



# NAPCO BLACK BOX™ PROGRAM FOR OEM APPLICATIONS



## NBB2800

### ACCELERATED 8 OR 16 DOOR ACCESS CONTROLLER



This 8 or 16 reader Napco Black Box™ Series Controller supports 8 readers (standard) or 16 readers (with optional Eight Reader Expansion Plug-in PCB) and has 24 inputs (expandable to 72), 1 tamper alarm and 17 relay outputs (expandable to 65). It also includes a locking steel enclosure, power supply and room for 2-12AH batteries (batteries are not included). Additional features include the Plug-in network interface (included on all units), memory expansion (optional) and input/output expansion (optional). In addition to power for the controller and eight readers, 600ma at 12VDC is provided for accessories, including power for strikes and mag-locks.

**NBB2800** is an expandable, high speed intelligent controller capable of supporting all access control functions for 8 or 16 doors. This distributed processor-based controller will operate as a standalone unit in the event communications with the server are interrupted. It can be a powerful access control, security management and video integration solution. Once programmed, the controller does not require continuous server communications, as it automatically stores system transactions in its internal memory. It's memory is field expandable, allowing for greater cardholders population and/or larger transaction buffer. The controller Flash EPROM firmware is easily upgraded when additional features or system enhancements are required. The **NBB2800** has robust onboard multi-stage lightning protection, for maximum reliability, even in harsh environments, that are power-outage-prone. It accepts Weigand output devices and supports virtually all card/reader technologies. Proximity, Smart, Biometric, Magnetic Stripe, Barcode, Weigand and Keypad readers are easily connected and controlled. The panel can typically store multiple (up to 10) card bit formats in its internal memory, making it a cost-effective retrofit panel. Supporting multiple bit formats allows existing card populations and readers to remain in place when upgrading to it.

For the lowest acquisition & maintenance costs, the **NBB2800** has an integrated network interface standard (included with all units) to allow

it to be directly connected to a local area- network (LAN). Combine that with a total of 20MB of memory (4MB standard, expandable to 20MB) and it is a high-speed, 8 or 16 reader network panel capable of storing Million+ badges, typ.

#### Specifications

- Min. 40,000 card capacity, 100,000 to 200,000 typical, expandable to million+
- 8 or 16 Wiegand Output Readers (Eight standard onboard), Eight additional readers with Optional Reader Expansion Plug-in PCB
- Eight or Sixteen Keypads (Wiegand Format only)
- Superfast 54 MHz 32 bit processor
- Onboard direct-connect LAN adapter for speeds 921K BPS (stand. on all units)
- Downloadable Firmware loaded to Flash memory 2 sec or less
- Under 5 minutes for full downloads (firmware and data).
- 24 supervised inputs (stand.), Expandable to 72 using I/O Expander (3 I/O Expander Boards Max. on 8 Door and 2 I/O Expander Boards Max. on 16 Door)
- 17 Form C rated relay outputs (standard-All relays 2.5 AMP PTC Limited), expandable to 65 using I/O Expander (If 3 I/O Expander boards are used on a 16 Door NBB2800, the inputs are not avail. on the third I/O Expander Board)
- 4MB on-board memory, expandable to 20MB
- 1000 std. transaction buffer, expandable to 10,000 (software dependent)
- Super-capacity power supply for max. standby and reader power
- Reader Power 1.5A@5VDC (total for all readers), 350mA@12VDC(max. for each reader)
- Accessory Power 600mA@12VDC
- Switchable P.S. 120 VAC/240 VAC, 120W Nominal
- Battery Backup 3-4 hours with 2-12 AH batteries at Max. Load (batteries not included)
- Enclosure Size 24.18"H x 16.13"W x 5"D
- Shipping Wt. 48 lbs.



# NBB2800

# EXPANDABLE TWO-DOOR ACCESS CONTROLLER

## Ordering Information

### Expansion boards

In addition to memory expansion capabilities, the **NBB2800** will accept up to three input/output expansion boards.

The input and output expansion boards are mounted in a separate enclosure(s) within 24 inches of the enclosure. One Alarm/Relay Expander Board provides 16 supervised inputs and 16 relay outputs.

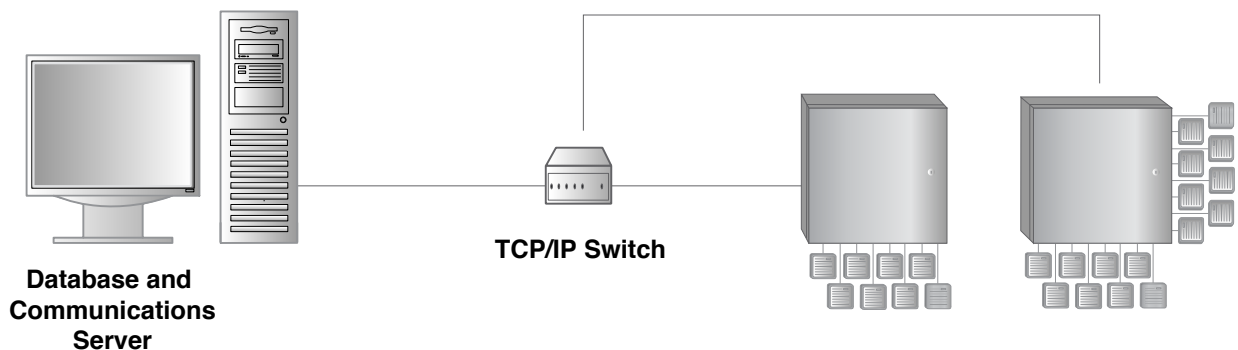
### Network interface

Network Interface (included) provides an onboard direct-connect LAN adapter for speeds over 921K.

| Part No.              | Description   |
|-----------------------|---|
| <b>NBB2800</b>        | Eight/Sixteen (8 /16) Reader processing panel with fast 54MHz 32-bit processor; 4MB on-board memory capacity, expandable to 20MB; supports up to 40,000 cards, typ., expandable to over a million; 24 supervised inputs, expandable to 72, 17 Form C-rated relay outputs (expandable to 65 ), tamper. On-board direct-connect LAN adapter for speeds over 921Kbps. Unit shipped complete in a lockable steel enclosure including relay board for 8/16 doors, on-board ethernet adapter, power supply/charger and battery standby(batteries not included) for memory and system operation. UL294 and CUL Listed. |
| <b>NBB2800EXPRDBD</b> | Optional 8-Input Wiegand/Mag plug-in board, for door-contact monitoring and power.  |
| <b>NBB1300IOCOMBO</b> | Optional Input/Output Relay Board provides 16 supervised alarm inputs and 16 Form C relay outputs. Supplied with RJ12 connector cable and within enclosure with power supply, charger and battery. (Can house one additional board, NBB1300IOBD.)   |
| <b>NBB2800RS485BD</b> | Optional Full-duplex EIA485 Repeater Board with ground fault isolation. (Plug-in board).  |
| <b>NBB1800NETBD</b>   | Ethernet Adapter (Best Option: Alternative to EIA and 485 communications).  |
| <b>NBB18ACCMEMBD</b>  | Optional 8MB Memory expansion board (stick), add up to 2ea. for 20MB memory.  |
| <b>NBB2800RLYBD</b>   | 17-Relay expansion board, provides 16 Form C-rated outputs plus tamper (Replacement use.)   |
| <b>NBB2800PMBD</b>    | Panel Mother board circuit board only. (Replacement use.)   |
| <b>NBB2800PCHGBD</b>  | Power charger board (Replacement use.)  |
| <b>NBB2800PS150</b>   | 12A power supply (Replacement use.)   |

### NBB2800 8-16 Door intelligent Controller

The panel can connect to the server via 10/100 Base-T LAN/WAN (standard), EIA-232 (optional) and EIA485 (optional). Refer to the **NBB2800** Service and Installation manual for additional detailed system wiring information.



**For more information, please contact your local sales representative**

