

MASTER SYSTEM SPECIFICATIONS

greenBOX MASTER computers	EG102, available models (fans x channels) a (1x22), b (1x44), c (2x22), d (4x11), e (1x88), f (2x44), g (4x11). Power supply 230V AC (from Power MASTER), industrial OMRON PLC with touch screen, phone modem for system update & up/download of data.
Power MASTER units	Power supply 460V 3-phase. Inverter + contactor bypass. Input filter and line reactors included. Available models: EG145A, EG160A, EG175A, EG190A, EG110A, EG1150A, EG1180A, EG145A, max. current of fan motor is 45A, EG1300A max. current is 300A, for example EG110A is rated approx. for 90 HP), Complete pre-engineered package ready for installation.
Gates	Compatible with Ecogates 5" to 16" and with pneumatically operated gates (requires adapter).
ECODE/i sensor interface	One sensor is required per one workstation, sensors and gates are connected via CAT5 shielded wire to greenBOX computer. Toroidal sensor (coil) is used to monitor workstation activity.
Optional accessories	"Transport on Demand" to control transport fan or screw, air-lock, cleaning arm, cleaning air compressor in proper sequences and delays (according to dust collector manufacturer specification). Starts dust collector automatically when first operator switch ON any workstation, stops dust collector automatically to save electricity.
DataMining PC software	The Ecogate System monitors energy usage as well as the activity of all workstations connected to the system. Measured values are recorded on a CompactFlash card, data can be downloaded via modem to any Windows PC with Ecogate DataMining™ software. DataMining software is importing the downloaded data to a database, and every new data file is merged into the current database records and checked for duplicity.

System Features: Updatable firmware; data collection on CompactFlash card; up to four fans can be controlled by greenBOX; system Autostart /Autostop; password protected; direct touch screen or Windows PC programming; Fan start current reduction by using S-curve ramp; Fan shut off programmable delay; System maintains minimal air-flow; One button switch to MANUAL (bypass) operating mode; Interlock feature (if transport fan is not running, system stops automatically); "System Run" output for spark detection systems; Static pressure compensation for each gate; Computer RUN safety feature (if computer is not running correctly, Power MASTER is automatically stopped), "Negative pressure too high" safety feature; "All gates open in stop mode" safety feature; Modem communication with any Windows PC with Ecogate DataMining software (savings evaluation & workstation activity reports, firmware update, warnings & errors, service requests, plant efficiency evaluation, consumption and more); Savings of whole system settings to/from CompactFlash card (backup, documentation for customer & installer, setting); System can maintain values in three system branches for better system balancing; Advanced serial line communication between inverter and computer (kW, current to the motor, voltage, last error dump values); Help screen for each control page; Statistical functions (average # of running workstations, average power, etc.); History of errors and warnings accessible from touch screen; Warning for gates which are not operating correctly; Cleaning cycle is programmable branch by branch or whole system at once; Automated setup of inverter via greenBOX computer (much easier and time saving setup, prevention of programming errors); I/O boards for easier, faster, cost effective connection (plug-in terminals & color coding); Test switches (input enable, run) & Indicators for faster debugging; Variable speed drive error messages are displayed on greenBOX MASTER screen in plain English.