

Feature List

Note: Depending on which version of Ultragard 2000[®] software is used, the functionality of some features listed below may vary. Contact TDSi Technical Support to confirm feature availability.

User capacity	Between 6,400 and 49,800 depending on configuration (see separate section: Card Capacity)
Door and reader configuration options (per Xm or Xs controller)	1 door, 1 reader 1 door, 2 readers 2 doors, 1 reader each
Reader technologies	Most reader technologies are supported provided they use a Wiegand or Mag-stripe interface. This includes most Proximity, hands-free and smart-card technologies. Contact TDSi for compatibility details of readers not actually supplied by TDSi.
User Keypad options	Only TDSi-supplied keypads are compatible - no extra cable is required for these. Each reader may have a keypad or keypad/display unit.
Anti pass-back	Global across a 16-door system, or timed on a per-reader basis.
I/O per controller (fitted as standard)	8 supervised inputs, 4 change-over relays (see separate inlay for details on upgrade options)
Time Groups	64 weekly schedules
Elevator Control	Up to 36 floors depending on number of outputs (see separate section: Inputs and Outputs)
Counters (e.g. for car park control)	16, each with a capacity of 65535 and configurable upper and lower limits
Fallback	If communication between a slave and its master fails, the slave will automatically go into "fall-back" mode. During this mode, access will be granted to any card that falls numerically between the lowest and highest card numbers stored in the master. (Card numbers are stored only in the master, with the exception of the highest and lowest numbers, which are also stored in the slaves for such an eventuality. This feature can be disabled if required). A slave in fallback mode can record up to 100 events, and the master will collect these when communication resumes.
Display at reader (when appropriate)	Fixed 16-character message plus 16 character user-specific message
Stand-alone features	Intuitive menu-driven programming via removable, remotable programmer Validation and voiding of cards (singly or in blocks) Printer-output for events (including names) and reports Diagnostics and Multi-level password control
Access modes	Card only, Card+PIN, PIN-only
Alarms (via message or relay)	Door Forced, Door Ajar, Access Denied, Input triggered, Input tamper, Duress

Technical Specifications

Cabinet	Dimensions: 330 x 317 x 95. Space provided for 2 x 7AH stand-by batteries 12 mm stand-off for rear access via conduit
Operating Environment	Temperature range: -5° C to +45° C. Humidity: 95% rh max (non-condensing)
Mains Power Supply (where fitted)	Input: 220-240V, 48 VA max Outputs: 1.3A for controller, 2 x 1.3A for locks, 2 x outputs for stand-by batteries
Inputs	Suitable for non-supervised, 1-resistor supervision or 2-resistor supervision
Relays	Form C dry change-over contacts, rated at 2A at 30 V DC
Xm Communications interfaces	1 port, either RS232 or RS485, for communications with PC or printer. 1 port, RS485 for communication with Xs units (slaves).
Xm Slave interfaces	1 port, RS485 for communication with Xm (master).

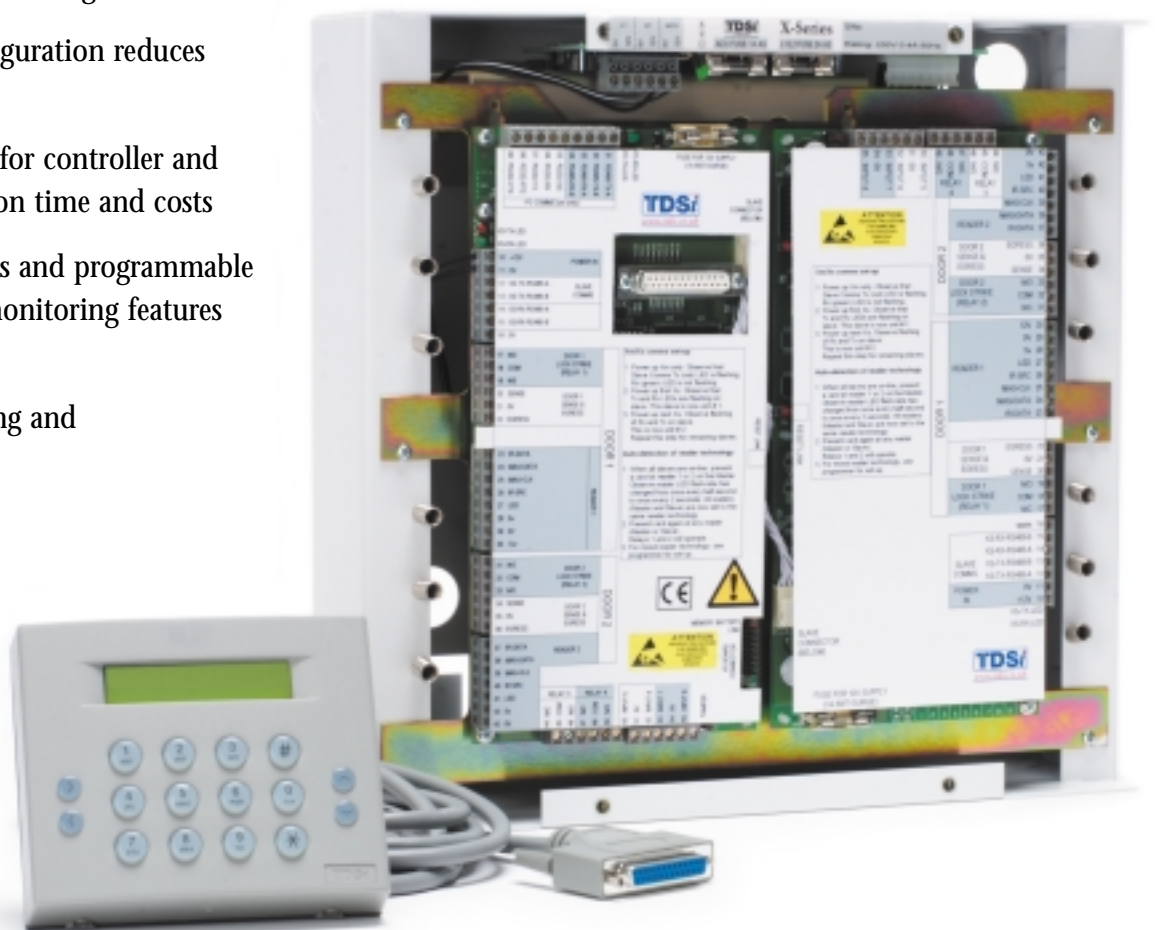
Microlock[®] X-Series

Suitable for anything from one door to hundreds, the modular nature of the X-Series range of access control units allows full flexibility in system design.

Systems can operate stand-alone, or can be managed and monitored using Ultragard 2000[®] software.

Features and Benefits

- Modular system allows full flexibility and cost-effective system design
- Master-and-slave configuration reduces hardware costs
- Built-in power supply for controller and lock, reduces installation time and costs
- Spare supervised inputs and programmable relays provide alarm-monitoring features at no extra cost
- Packed with time-saving and cost-saving features



Microlock[®] X-Series

System Description

The heart of the system is a two-door, two-reader master controller, the Xm.

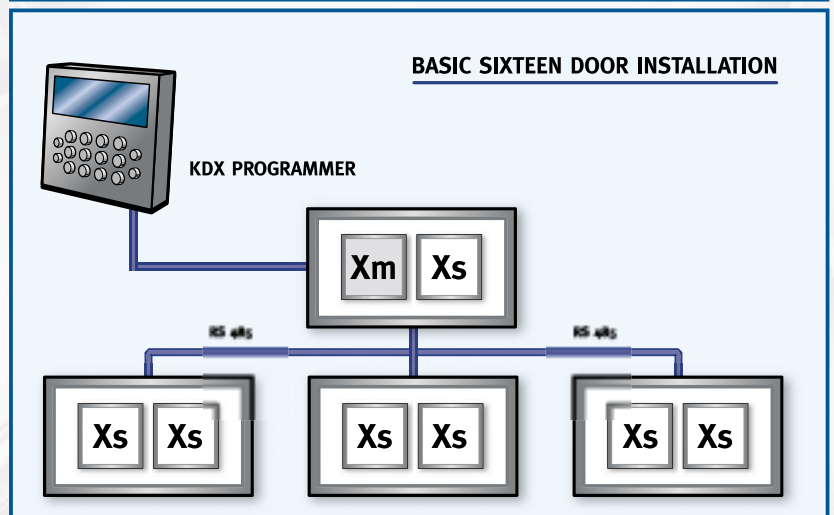
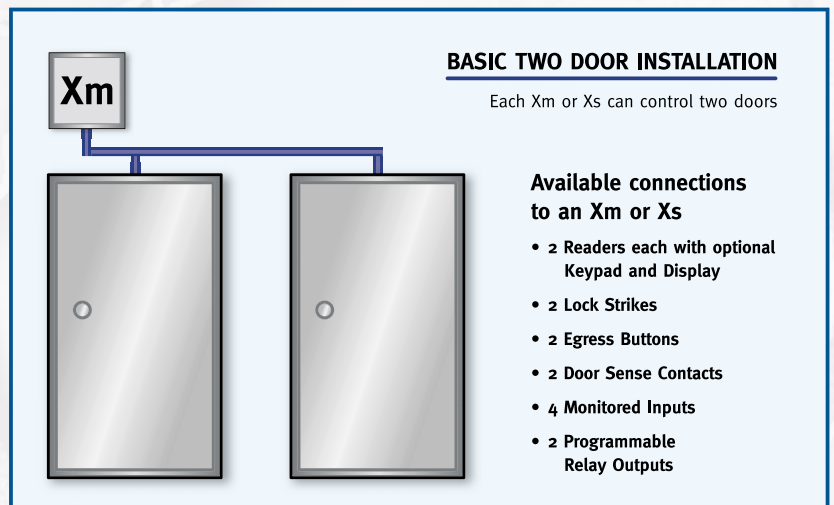
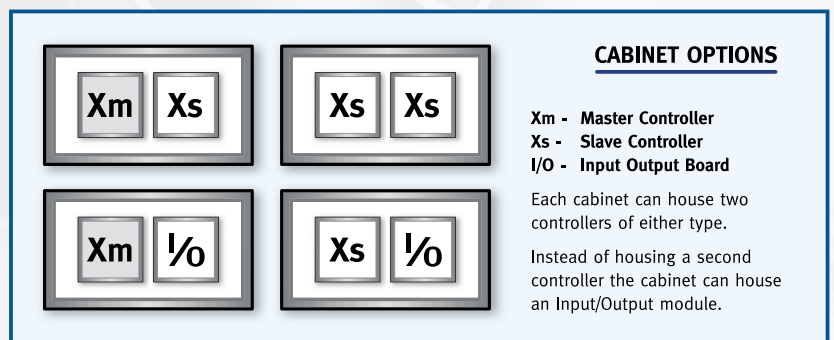
This can be linked to up to seven slave units - called Xs - each of which is also a two-door controller, allowing up to 16 doors to be controlled with 16 readers. Up to 1200 metres of cable can be used in creating the system.

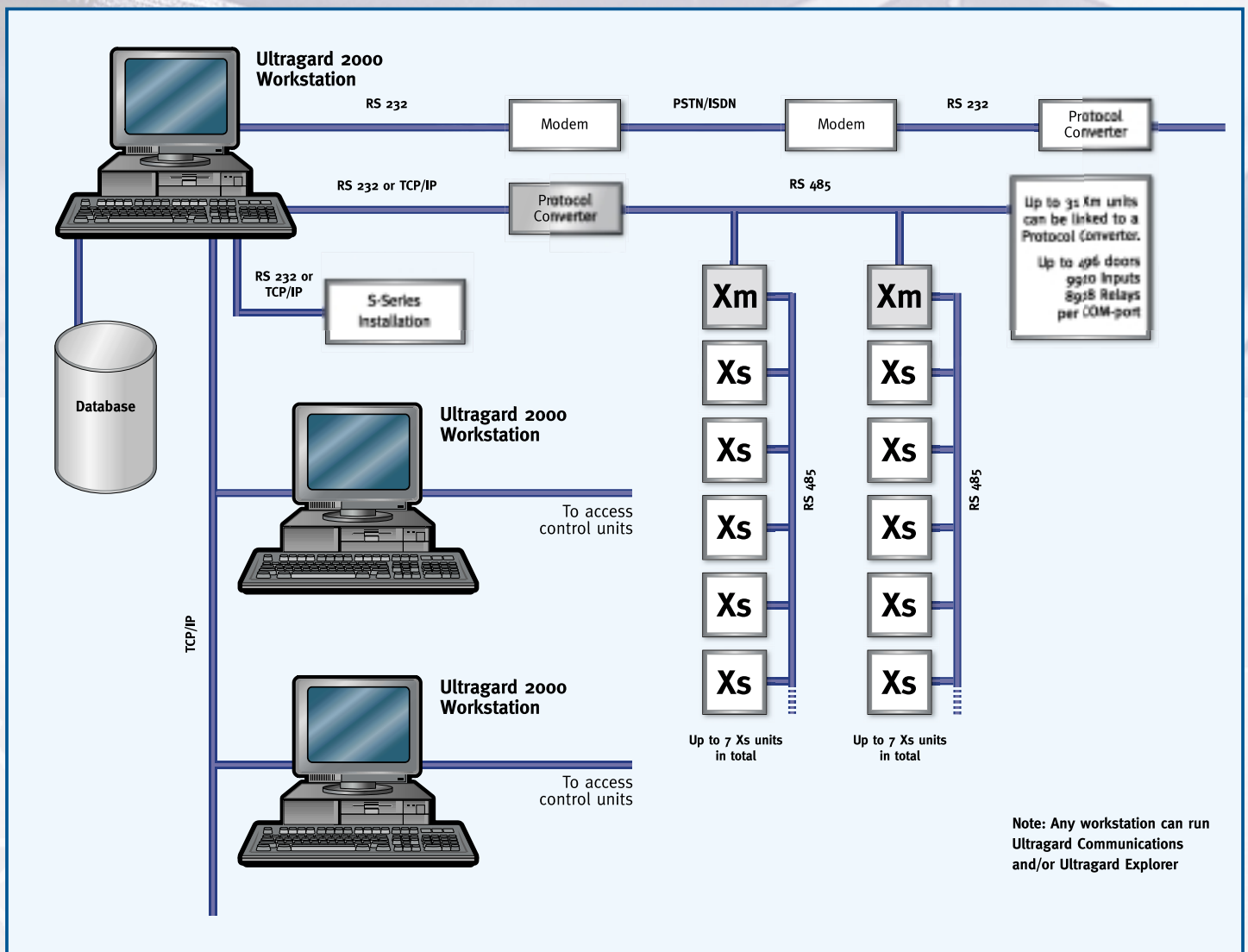
The Xm contains the memory and intelligence to run the system. The Xs slaves rely on the Xm to make decisions, and this approach significantly reduces the cost-per-door. In the event of failure of the Xm, there is optional "fall-back" security within each of the Xs units which allows access to specific ranges of cards.

The metal cabinet can house up to two controllers of either type. So an Xm combined with an Xs provides a four-door controller - the Xm4 - within a single housing. Similarly, two Xs units can be installed into one cabinet providing a four-door slave unit - the Xs4.

Instead of housing a second controller, the cabinet can house an I/O (input/output) module connected to the Xm or Xs. Three I/O modules are available; with differing combinations of inputs and outputs (relays).

The cabinet also contains a twin mains power supply (for the controller and the locks) and twin battery reserve.





Multiple installations controlled and monitored by Ultragard 2000®

Multiple controllers can be computer-linked, thereby allowing almost limitless systems to be implemented, monitored and controlled using TDSi's renowned software, Ultragard 2000®.

Sites using TDSi's S-Series controllers can be extended using X-Series controllers on a separate communications port.

Card Capacity

Card capacity depends on the number of slaves being controlled by the master.

Configuration	Card Capacity
2-reader system	47,000 (28,000 with M.E.*)
4-reader system	36,000 (24,000 with M.E.*)
6-reader system	30,000 (21,000 with M.E.*)
8-reader system	25,000 (18,000 with M.E.*)
10-reader system	21,000 (17,000 with M.E.*)
12-reader system	19,000 (15,000 with M.E.*)
14-reader system	17,000 (14,000 with M.E.*)
16-reader system	15,000 (13,000 with M.E.*)

Inputs and Outputs

All inputs are capable of 1- or 2-resistor supervision. An I/O board (Xr, Xi or Xri) must be fitted in the same cabinet as the Xm or Xs that controls it.

Board	Configuration	Inputs	Relays
Xm or Xs	1 door	1 x door sense 1 x egress 6 x spare	1 x lock strike 3 x spare
Xm or Xs	2 doors	2 x door sense 2 x egress 4 x spare	2 x lock strike 2 x spare
Xr (only relays)	n/a		32
Xi (only inputs)	n/a	32	
Xri (relays and inputs)	n/a	32	16

* M.E. Messaging enabled.