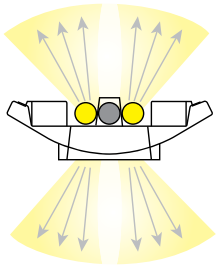
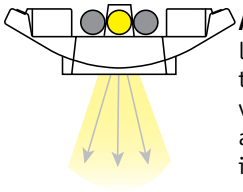
A+CLASS™

Classroom Energy Management

TWO LIGHT LEVELS



General: Uniform light levels across the student desks to facilitate a high quality learning environment.



A/V (Audio/Visual): Lowers light levels to focus attention at the front of the classroom for presentations or audio visual projections, while providing appropriate light for note taking and interaction.

EASY TO OPERATE

A Teacher Light Control Station is provided for recommended placement at the front of the room near the teacher's desk, within 6" of the whiteboard. All switches have clearly labeled switch buttons so that teachers, substitutes and guests can intuitively operate the system.

General / A/V Switch – Allows teacher to change light between General and A/V modes. Alera's exclusive NeverDark feature ensures that classroom lighting will not be disrupted when switching modes.

Study Time Switch - Provides uninterrupted General lighting during testing or other periods of low activity. Set for 60 minutes out of the box, Study Time can be reduced for lower grades where testing averages less than one hour. LED indicator shows the teacher when Study Time is engaged.

Master On/Off Switch – For placement at the primary entrance, allowing manual control of General lighting if desired.

OPTIONS

Additional switches for row control and/or multiple entry points.

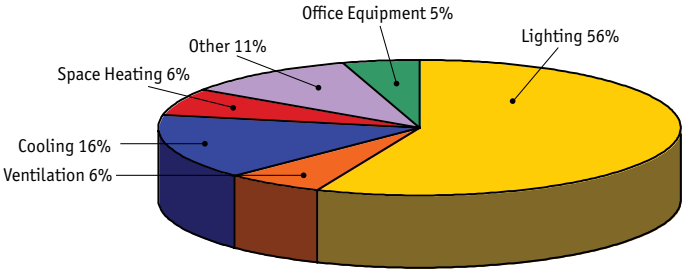
A/V Teacher Dimming, GEN Teacher Dimming, A/V and GEN Teacher Dimming

1, 2, 3 or 4 Rows of Daylight Dimming

1, 2, 3, or 4 Rows of Daylight Switching

1, 2, 3, or 4 Rows Where Each Row Varies (example R1- Dimming, R2 Switching)

ELECTRICITY USE IN EDUCATIONAL BUILDINGS (SOURCE: DOE, EIA)



SAVES ENERGY

A+CLASS uses recommended best practices to significantly reduce classroom energy consumption. Using a strategy that dramatically reduces the electrical load, provides automatic shutoff and allows teacher control, classroom energy reductions can average as much as 30-50% compared to traditional systems[1].

EASY INSTALLATION & COMMISSIONING

Classroom Control Module: Each A+CLASS™ system includes a CCM for the connection of all low voltage and line voltage components. The CCM is a UL listed central control hub for each classroom, which provides a number of user-friendly features.

Color Coded Plug & Play: Each CCM comes with color-coded low voltage plug-in ports with corresponding colored low voltage cables. Each function is a different color to take the guesswork out of what-goes-where.

LCD Display: An intuitive menu driven user interface guides the system user through system set-up and configuration. Scroll-through text menus eliminate guesswork.

Portable Control Templates: Set up a typical room and copy the control template onto the A+CLASS™ SD card. Take the SD card to the next CCM. Copy the settings onto that device. The room is now set up. Repeat for each identical classroom.

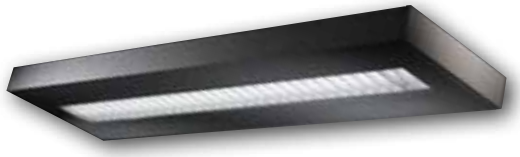
Classroom templates can be downloaded onto our exclusive A+CLASS™ SD card via CCM or e-mail.

[1] Source: CEC PIER 4.5, 01-2005, Energy & Cost Savings, Energy Savings. 500-01-041

Patent Pending.

ORDERING LUMINAIRES

All A+CLASS™ components originate within the Hubbell Lighting platform for a single source – not just a single point of sale.



Daylight Sensor

Occupancy Sensor

ORDERING CONTROLS

	APCS	-		-		-		-		-		-		-					

ROOM NO.
___ Type Mark (Max 10 characters. Will appear on separate line of order and label.)

NO. OF ROWS
2 Two
3 Three
4 Four

VOLTAGE
120 120V
277 277V

NO. OF TEACHER STATIONS
1 One (Std.)
2 Two

MANUAL CONTROL AT ENTRY
MC01 Single master on/off control for all rows
MC2 Two sets of master on/off switches that control all rows (for dual entry/exit points)[2]
RC Independent row control on/off switches for all rows (1 switch for each row, ganged)
RC2 Two sets of independent on/off switch stations for all rows[2]
MRC One master on/off plus one row control on/off switch for each row (ganged together)
MRC2 Two sets of master on/off plus one row control on/off switch for each row (ganged together)
NA None supplied by Alera
MCU Custom Master/ Row Control station[3]
MCU2 2 Identical Custom Master/Row Control Station[3]

OCCUPANCY SENSOR
01 One Occupancy Sensor
02 Two Occupancy Sensors[2]
RP 1 Ceiling Mount Occupancy Sensor with RP flying leads
RPO2 2 Ceiling Mount Occupancy Sensor with RP flying leads
OCU Custom Selected Occupancy Sensor (specify)
OCU2 Custom Selected Occupancy Sensor (specify)

1 2 3 4 DAYLIGHT ROW
Blank No daylight (on any row)
DD Daylight Dimming: daylight sensor for dimming general mode [1]
DS Daylight Switching: Daylight sensor for switching general mode off when daylight is sufficient

SYSTEM
APCS A+CLASS

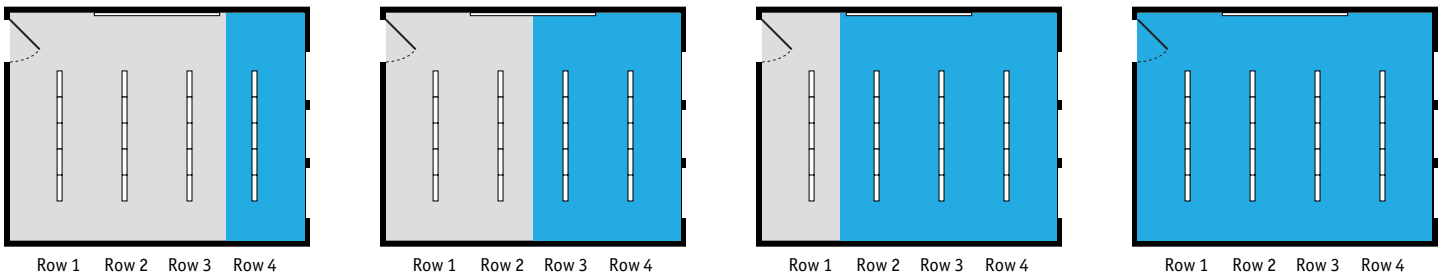
TEACHER STATION
TLC General/ A/V, Study Time
AVD A/V Teacher Dimming added to TLC[1, 2, 3]
GMD GEN Teacher Dimming added to TLC[1, 2, 3]
AGD A/V and GEN Teacher Dimming added to TLC[1, 2, 3]
TCU Custom Teacher Station

WHITE BOARD
NW No whiteboard lighting control
WT Whiteboard lighting control at teacher station[4]
WS Independent whiteboard lighting switch (not in teacher station)[2]
WCU Custom Whiteboard Station

DAYLIGHT SENSOR
ND No Daylight Sensor
DS Daylight Sensor
DCU Custom Daylight Sensor

[1] Requires 0-10V dimming ballast in lighting fixture.
[2] Includes additional plug & play cable.
[3] WT when used with 2 Teacher Stations will control one or more whiteboard lights from 2 locations.
[4] One raise/lower switch is provided which manually dims either General or A/V mode.

OPTIONAL DAYLIGHT SWITCHING AND/OR DIMMING



Example shown: Using only one daylight sensor in the above room, each participating row self adjusts to reduce electric light when sunlight is available.

Patent Pending.