



# Opti-Cam Surveillance System



Presenting a unique concept in security equipment, ADE's Opti-Cam offers an integration of CCTV, intruder and lighting control for today's demanding applications.

The first of its kind, this simple to install, combined VHS video recorder, 8 camera control unit and light switching system offers a low cost CCTV/security solution for domestic and commercial applications.

### **Combined video, 8 camera and lighting control unit**

A self-contained, flexible security solution that can be easily configured for any number of applications.

### **5 Operating modes**

- In/Out modes – provides customised event recording in either mode.
- Lighting control mode – creates the illusion of occupancy when out.
- Manual mode – enables the user to control and override the automatic settings.
- Scan mode – scans all cameras for preset times.

### **Intelligent event recording**

Only records events as they happen and does not record continuously, saving tape review time. An 8-hour tape could last for weeks.

### **Incorporates 32 programmable timer settings for each day of the week**

Has the flexibility to suit individual family lifestyles or control sophisticated routine operations in commercial or industrial environments.

### **Simple, on-screen programming**

User friendly, simple interface that allows the user to easily reprogramme the system set-up when desired.

# Opti-Cam Features Continued



## **Compatible with both CCTV monitors and/or TV sets (via SCART connection)**

Allows use of existing hardware, where available.

## **Integrates with most intruder alarm panels**

- Set/Unset – only one action for both systems. No need to change current habits when leaving the premises.
- Provides protection of valuable cameras connected to the system by using integral security panel tamper feature.

## **Uses standard alarm inputs**

The freedom to use any alarm input such as door contacts, movement sensors or pressure mats increases system flexibility.

## **Time and date generation**

Allows the recorded events to be offered in evidence.

## **Video tape permanently spooled**

Allows recording to start immediately upon detection.

## **Adjustable on-screen display positions**

Ensures the on-screen display is positioned in the most appropriate place to ensure the field of view is not obscured.

## **Connects up to 8 remote keypads or IR receivers**

Offers the user complete and immediate control over any aspect of the total system from any desired location on the premises.

## **Compatible with most existing CCTV cameras**

Enables faster, simpler upgrading of conventional observation systems.

## **Engineer and User codes**

Avoids changes to system set up by unauthorised users or potential intruders.

## **255 Event log**

Lists time and date of all activities as they impact the total system.

# Opti-Cam Surveillance System

## A new concept in CCTV

The first of its kind, this simple to install, combined VHS video recorder, 8 camera control unit and light switching system offers a low-cost CCTV system which will increase the scope of your security product offering.

By combining technologies ADE's Opti-Cam allows installers to be extremely competitive on price against other manufacturers' units with similar feature sets.

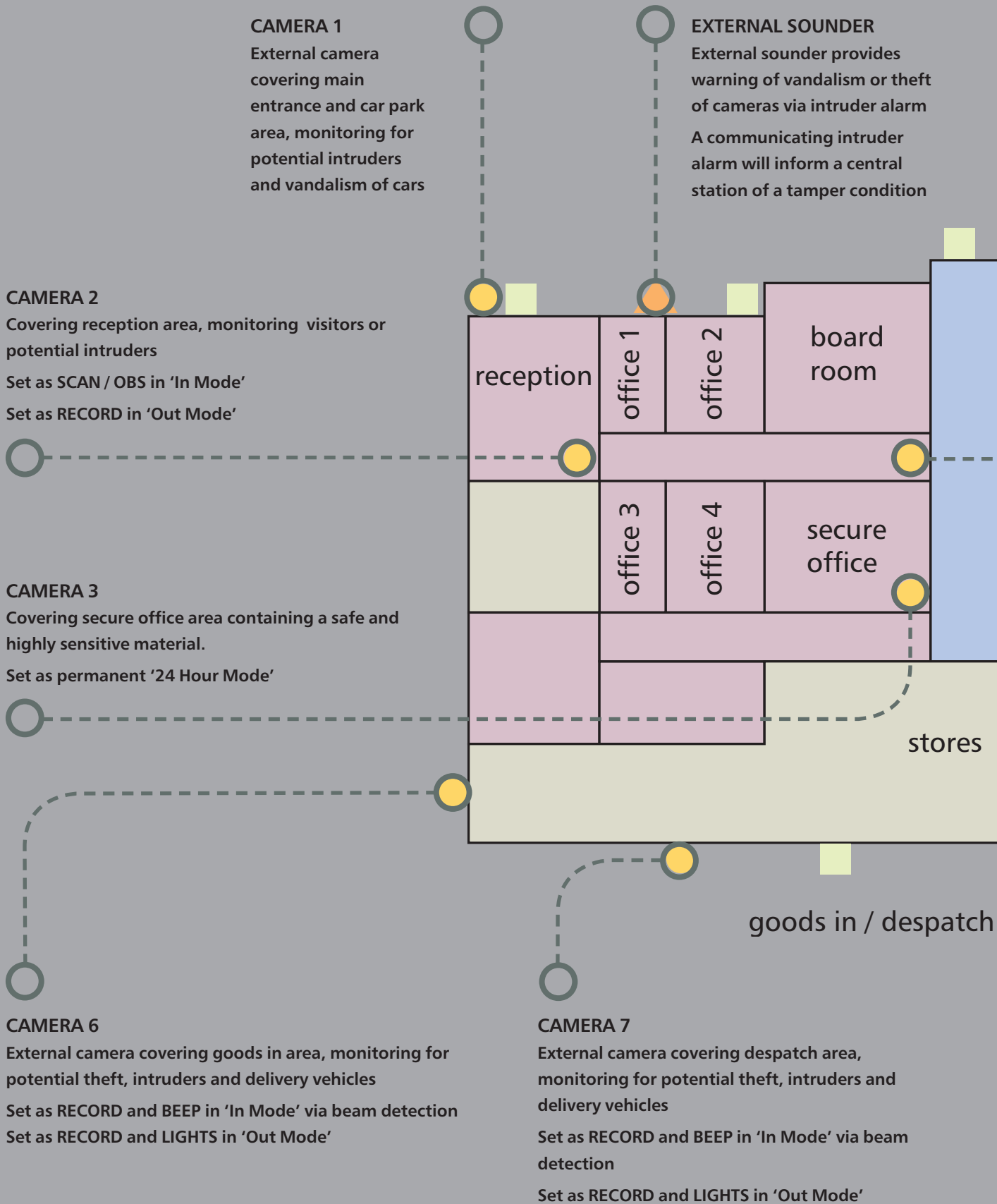


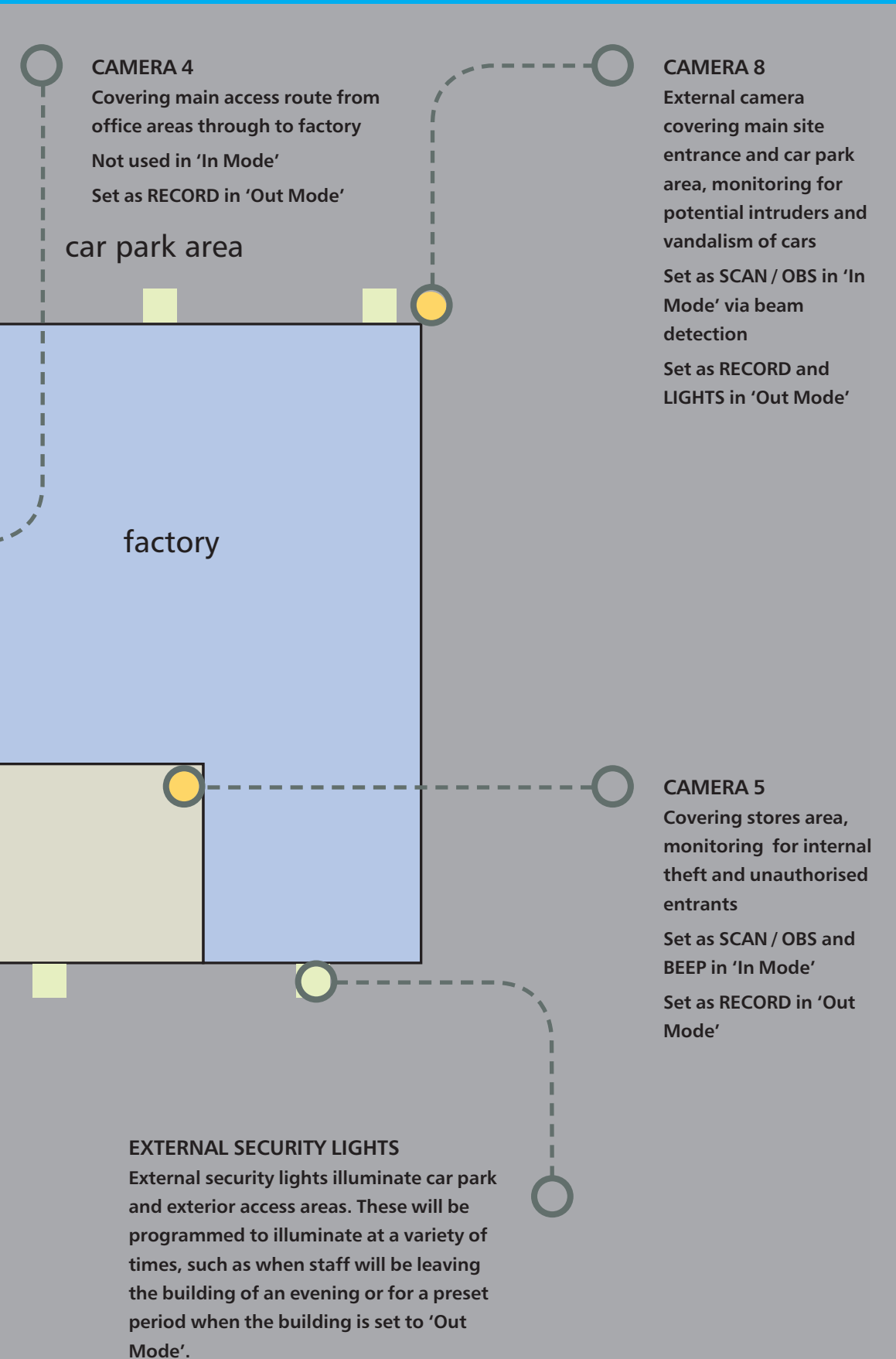
## Feature comparison

Alternatively, compared against Observation Systems of a similar price, Opti-Cam's feature set is much higher.

FEATURE	OPTI-CAM SYSTEM	OBSERVATION SYSTEM
Cameras	8	4
Operating modes	5	2
Keypads	10	0
Recording	Real time	Time lapse
Display	TV/monitor	Monitor
Quad	-	Yes
Time and date	Yes	
Auto/manual sequential switching	Yes	
Event recording	Yes	-
Movement activation	Yes	-
Alarm integration	Yes	-
Facility to control lights	Yes	-
Adjustable on-screen display	Yes	-
Programmable timers	Yes	-

# Opti-Cam Typical System Design





**Retail**

- Entrance/exit areas
- General monitoring
- Added surveillance to combat external theft
- Surveillance of stock, monitoring internal theft

**Industrial site**




- Entrance/exit areas
- Car park
- Reception
- Stores
- Goods in/out

**Warehouse**

- Entrance/exit areas
- Goods in/out
- Monitoring loading bay
- Reception area
- Vulnerable/secure areas

**Office**

- Entrance/exit areas
- Car park
- Reception
- Safe room
- Monitoring of offices

-  **CAMERA**
-  **EXTERNAL SOUNDER**
-  **EXTERNAL SECURITY LIGHTS**



# Opti-Cam Specification

OPTI-CAM	
Power requirement	AC230V, 50Hz
Power consumption	20W in record mode, and no cameras (see camera specs for loading per cameras) Remote Keypads and Light controllers also affect consumption. See respective specifications for individual consumptions
Operating temperature	5°C ~ 35°C
Operating position	Horizontal only
Dimensions	W 360mm x H 90mm x D 288mm
Weight	Approx 4kg

CAMERA CONTROLLER	
Max. no. of cameras	8
Signal system	PAL/SECAM colour and CCIR monochrome signals, 537 lines/50 fields
Video input	1.0Vp-p, 75Ω, unbalanced
PIR input	Float (standby), 0v (activated)
Input	-8dBm, (CENELEC standard), more than 47kΩ, unbalanced
Frequency range	20Hz to 16kHz
Power	12V, 2.4A max (1.2A per 4 cameras 1-4, 5-8)

ANCILLARY CONTROLLER	
<b>Remote operation</b>	
Number of devices on coms bus	Any combination of keypad and IR receivers up to a maximum of 8
Comms Interface	Proprietary (for added security and low cost) single wire half duplex, plus power
<b>Lights</b>	
No. of lighting controllers	2 (each controlling up to 4 x 500W loads at 230v 50Hz)
No. of daylight sensors	Up to 1 for each controller (2 per Opti-Cam system)
Comms Interface	Proprietary (for added security and low cost) single wire half duplex, plus power. Can chain from RKP
Isolation	5kV between mains and SELV circuits
Switching	Solid state switching on zero crossing of mains for reduced E.M.I. and improved reliability Power Factor tolerant for inductive loads
<b>Speaker output</b>	
Number of speakers	4 x 16W (not including RKP's internal sounder)
Signal	11Vp-p (pulse)
Output impedance	47Ω (short circuit tolerant)
<b>Tamper loop</b>	
Signal	Voltage free relay contacts, normally closed. Loop opened when camera goes missing
<b>Arm input</b>	
Signal	Programmable, active high or low (high: 2V to 30V, or low: <0.6V) (Generated by most alarm panels when set)

FUNCTIONS	
<b>Timers</b>	
Number of timers	32
Scope of timers	24 hour, any day(s) of week
Use of timers	Change of mode, VCR control and basic light control
<b>Mode of operation</b>	
Number of Modes	5 (with options)
Types of Modes	OUT (fully automatic, motion triggered camera select and record) IN (fully automatic, motion triggered camera select and optional record) LIGHTING CONTROL (creates the illusion of occupancy when out) SCAN (semi automatic, programmable camera sequence select and manual record control) MANUAL (fully manual camera select with manual record control)
Control methods	PIR movement sensor, manual via keypad, timer control, and/or ambient light level control
Size	Easy to read 28 column by 11 row
No. of configurations	8; 7 positions and an option for no display (not including menus)
Menus include	Event log display, timer set up, light control, date and time set up, camera set up, scan list set up, mode and options set up, and password set up for user and engineer
Maximum no. of events	255 most recent events
Type of events recorded	Change of mode, change of date, when storing any other event, and insertion and removal of cameras which are triggered while in IN or OUT mode, or cameras on 24hr points
<b>Lights</b>	
Number of lights	8

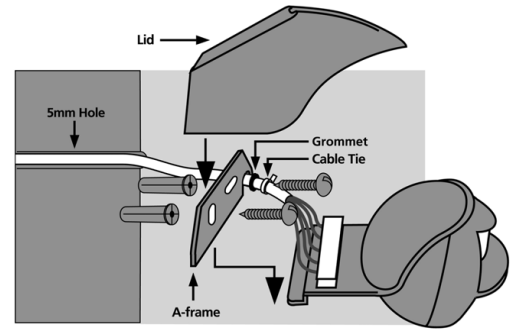
CAMERA SPECIFICATION	OPT 900	OPT900W	OPT780	OPT780W	OPT780C	OPT780CW	OPT520	OPT520W	OPT520C	OPT520CW
Operating Voltage	12V dc									
Current consumption	150mA									
Video output signal	1V pk-pk CCIR composite video signal									
1/3" b/w CCD camera	Y	Y	Y	Y			Y	Y		
1/4" colour CCD camera					Y	Y			Y	Y
Infra-red LED's	Y	Y	Y	Y			Y	Y		
Minimum Illumination	0.1 lux				4 lux		0.1 lux		4 lux	
Resolution	420				330		420		330	
Camera lens	3.6mm		4.3mm		3.6mm		6.0mm			
Viewing angle	90		72				52			
Audio output signal	2V pk-pk into 47K									
PIR sensor	Dual element, thermally stabilised									
PIR coverage	10 metres (max) with 90 degree viewing angle									
PIR output signal - standby	12v through 22k, On detection : 0v through 100R									
Internal heater	Yes									
Enclosure colour	Black	White	Black	White	Black	White	Black	White	Black	White
Enclosure UV stable	Y	N	Y	N	Y	N	Y	N	Y	N
Weatherproofing	IP45 (suitable for outside use)									
Cable length supplied	15m									
Product dimensions	80mm W x 110mm H x 115mm D									
Total package weight	0.75g									
Approvals	CE directive 93/68/EEC, EMC directive 89/336/EEC, BS EN 50081-1, BS EN 50082-1									



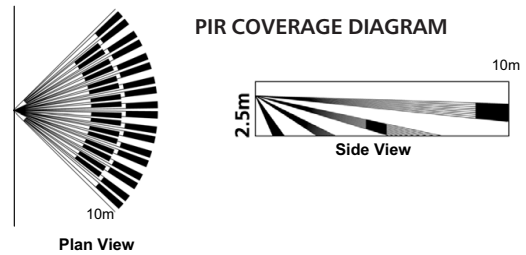
# Opti-Cam Cameras & Accessories



## MOUNTING DIAGRAM



OPTI-CAM CAMERAS		
RANGE	LIST NUMBER	DESCRIPTION
OPT	OPT520	52 degree b/w CCD camera with black case and 15m cable
	OPT520C	52 degree colour CCD camera with black case and 15m cable
	OPT520CW	52 degree colour CCD camera with white case and 15m cable
	OPT520W	52 degree b/w CCD camera with white case and 15m cable
	OPT780	78 degree b/w CCD camera with black case and 15m cable
	OPT780C	78 degree colour CCD camera with black case and 15m cable
	OPT780CW	78 degree colour CCD camera with white case and 15m cable
	OPT780W	78 degree b/w CCD camera with white case and 15m cable
	OPT900	90 degree b/w CCD camera with black case and 15m cable
	OPT900W	90 degree b/w CCD camera with white case and 15m cable



OPTI-CAM ACCESSORIES	
LIST NUMBER	DESCRIPTION
8EP365	Additional RKP for use with Opti-Cam
8EP373	IR receiver for use with Opti-Cam
8EP372	4 way light switch control unit c/w photocell
8EP383	IR remote control handset for use with Opti-Cam
8EP387	Daylight sensor

OPTI-CAM CABLE			
LIST NUMBER	DESCRIPTION	LIST NUMBER	DESCRIPTION
ATC13	15m Camera extension with connectors	ATC15	50m Camera extension with connectors
ATC14	25m Camera extension with connectors		

## ADE



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