



עיריית תל-אביב יפו

פרויקט מב"ט

תיק אתר

רובינשטיין 16





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1. אנשי קשר

מס"ד	שם	תפקיד	נייד
1			
2			

2. אישורים

מס"ד	גורם מאשר	שם	תפקיד	נייד
1	אגף מחשוב			
2	אגף תנועה רמזורים			
3	שפ"ע			
4	מאור			
5	אגף דרכים			
6	אגף מחשוב			
7	אגף מחשוב			

3. תיאור פרויקט

כתובת אתר:

רובינשטיין 16 מב"ט

פירוט אופן העבודה

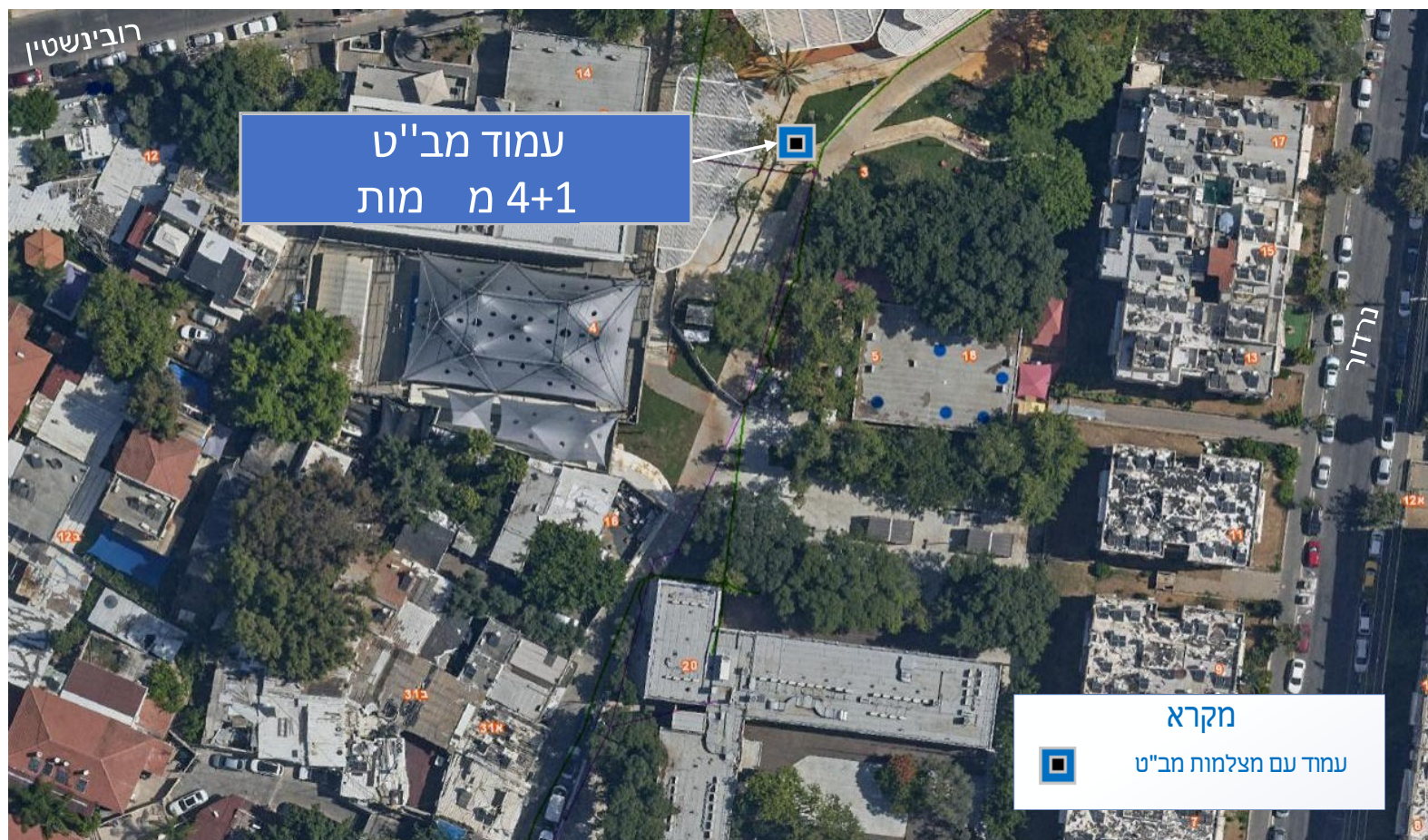
תכלית עבודה	פריסת מצלמות ברחבי הרחוב על עמודים ייעודיים
אתר הזנה	מרכז אביגל
פורט באתר	8
מיקום ארון תקשורת	על העמודים

שלבי ביצוע



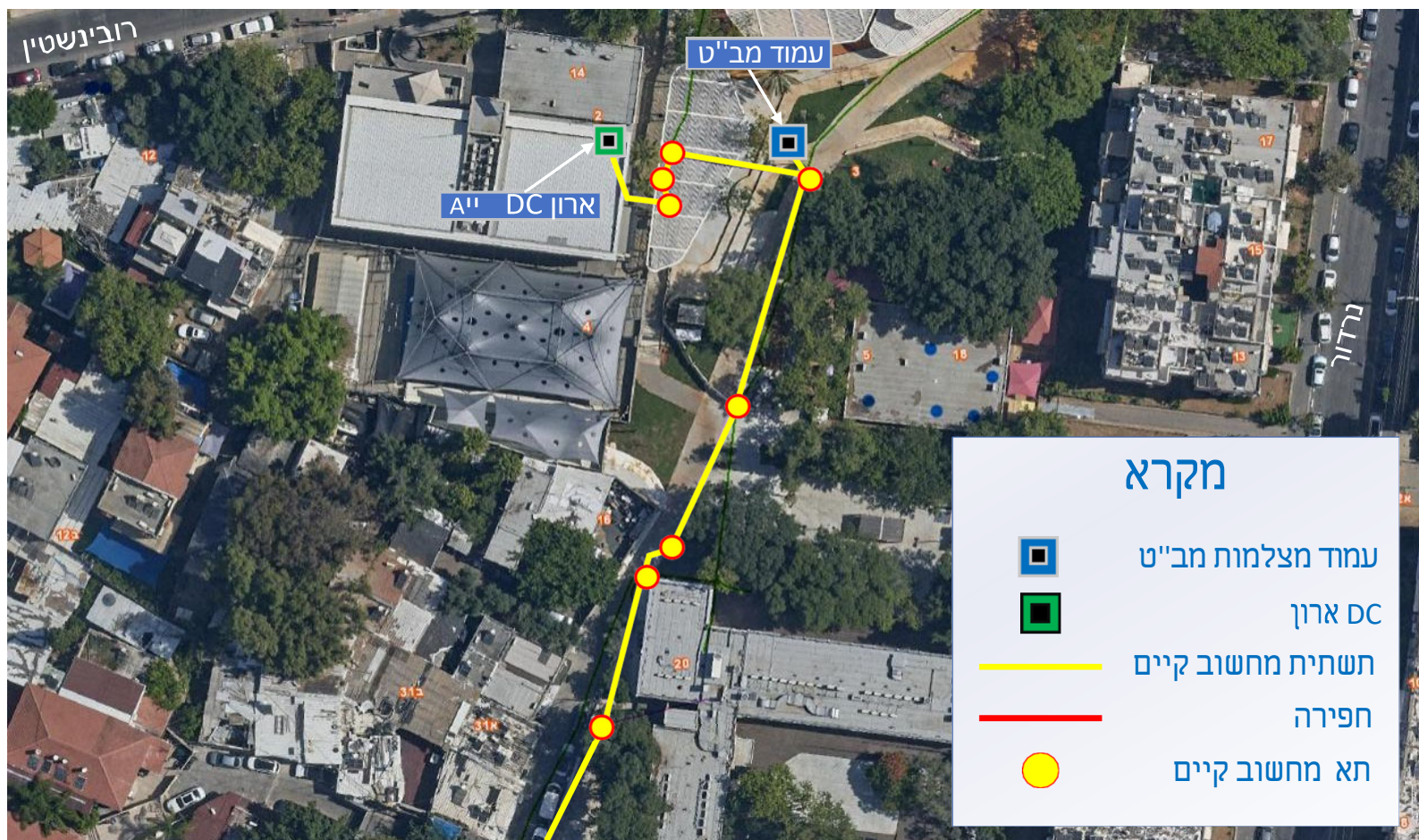
1	סיור ראשוני
2	ביצוע תכנון
3	ביצוע תשתית תקשורת
4	השחלה ופריסת כבל אופטי ו-DC
5	התקנת ארונות תקשורת ו-DC
6	ביצוע קלוד'רים
7	התקנת מצלמות על עמודים ייעודים/מבנה
8	הפעלת מערכת
9	תיק אתר

4. שרטוט כללי - פריסת עמודים ומצלמות



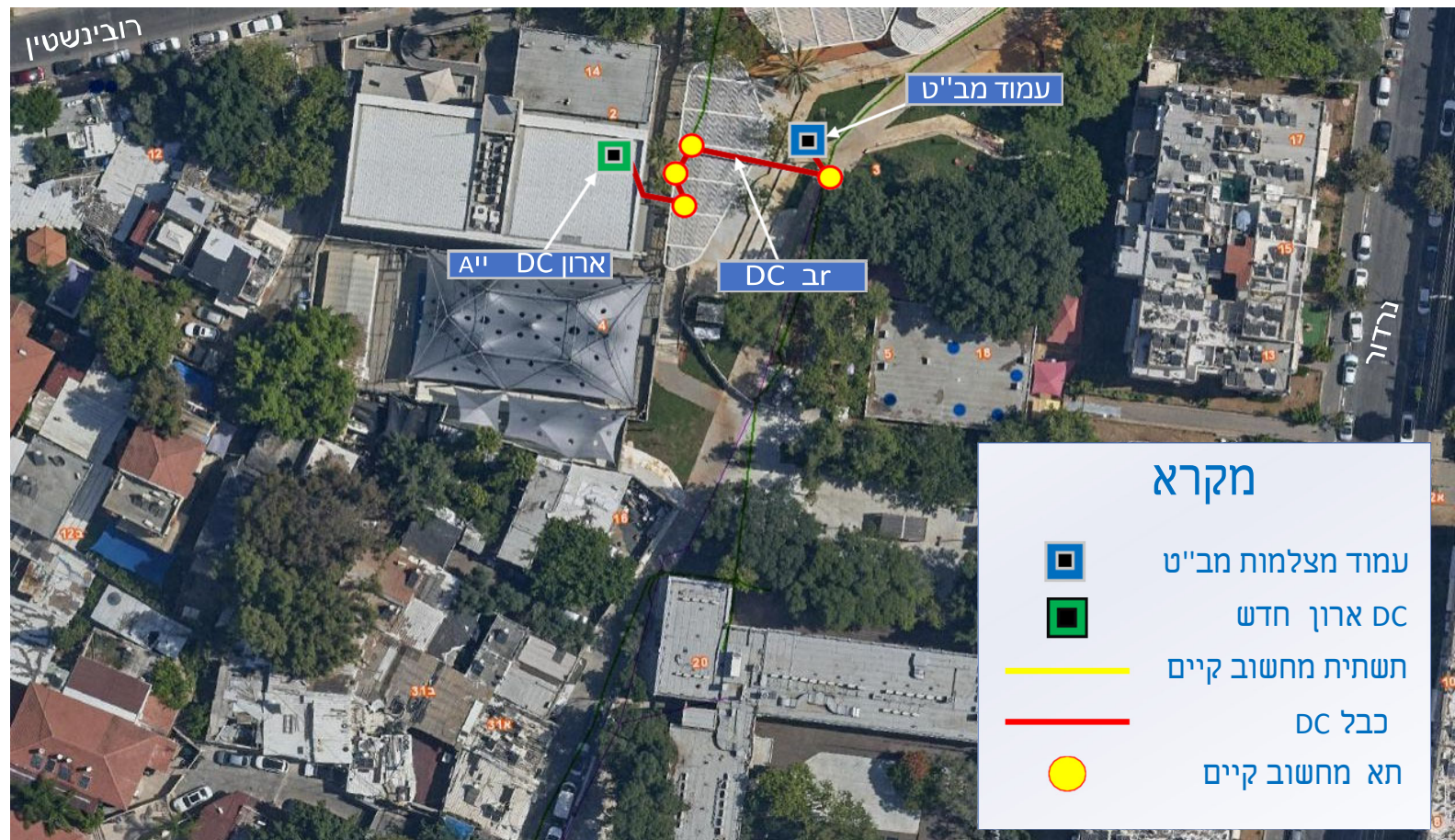
5. ביצוע תשתית

5.1 שרטוט פריסת תשתיות



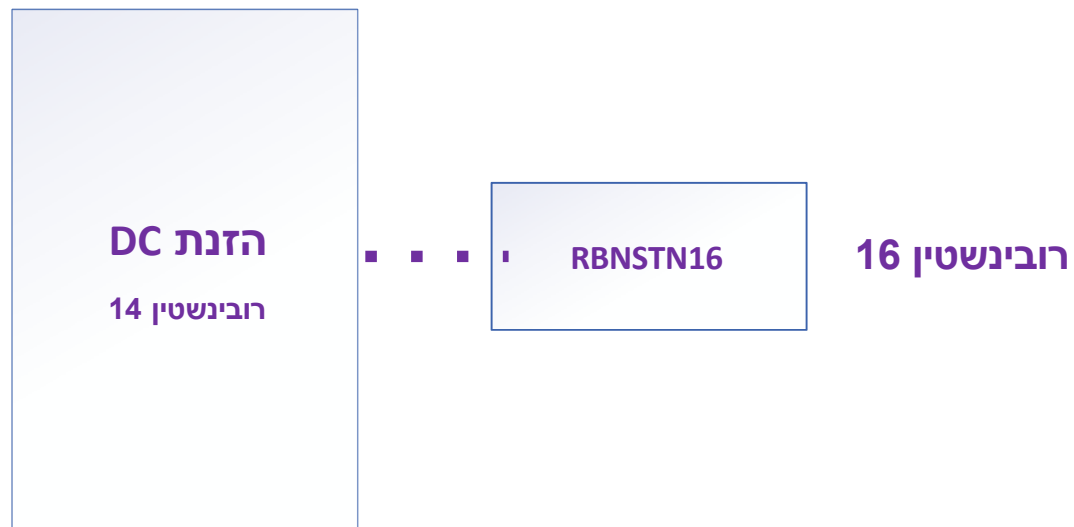
6. השחלת כבל DC

6.1 שרטוט פריסת כבל DC



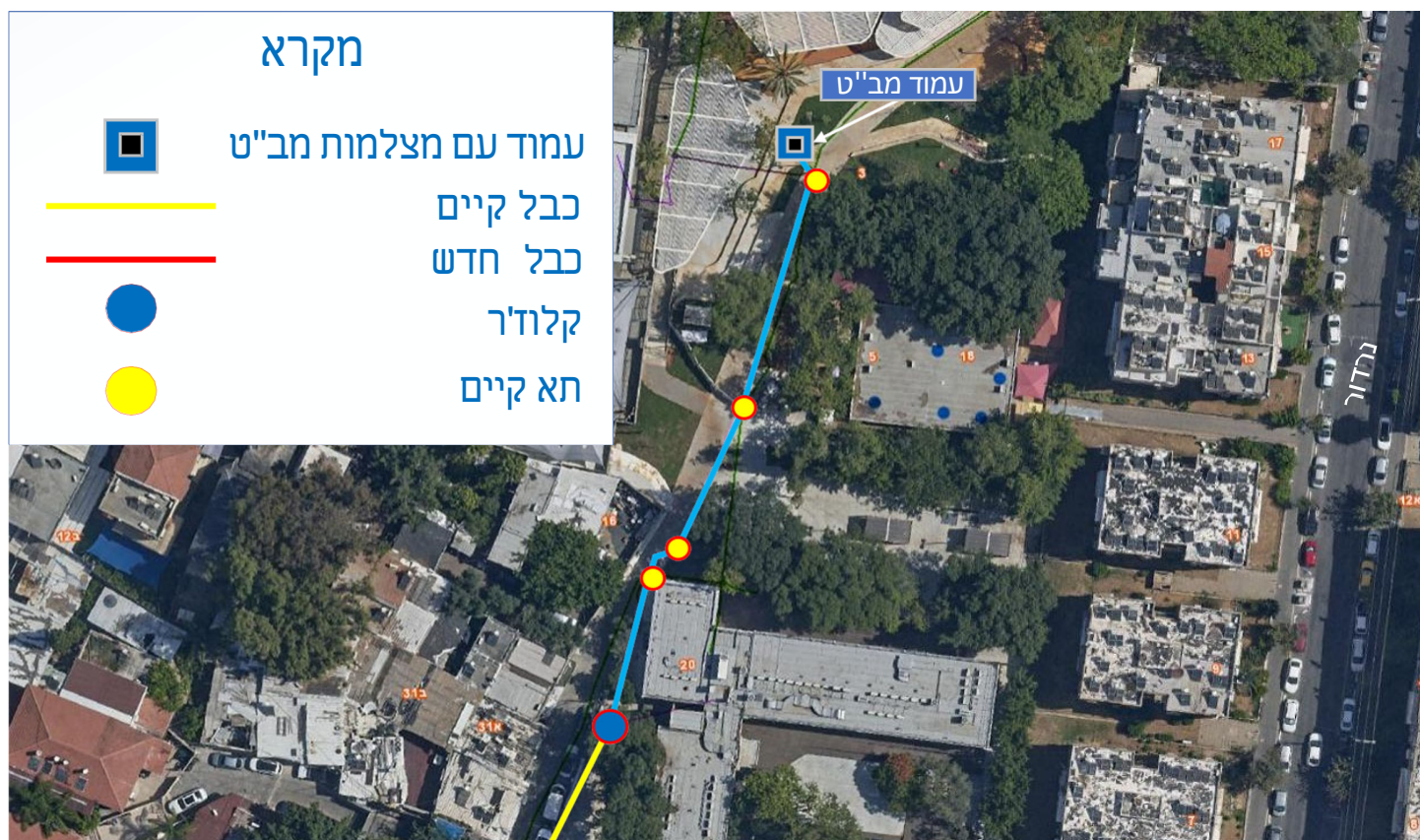


6.2 תרשים DC



7. אופטיקה

7.1 שרטוט פריסת כבל אופטי

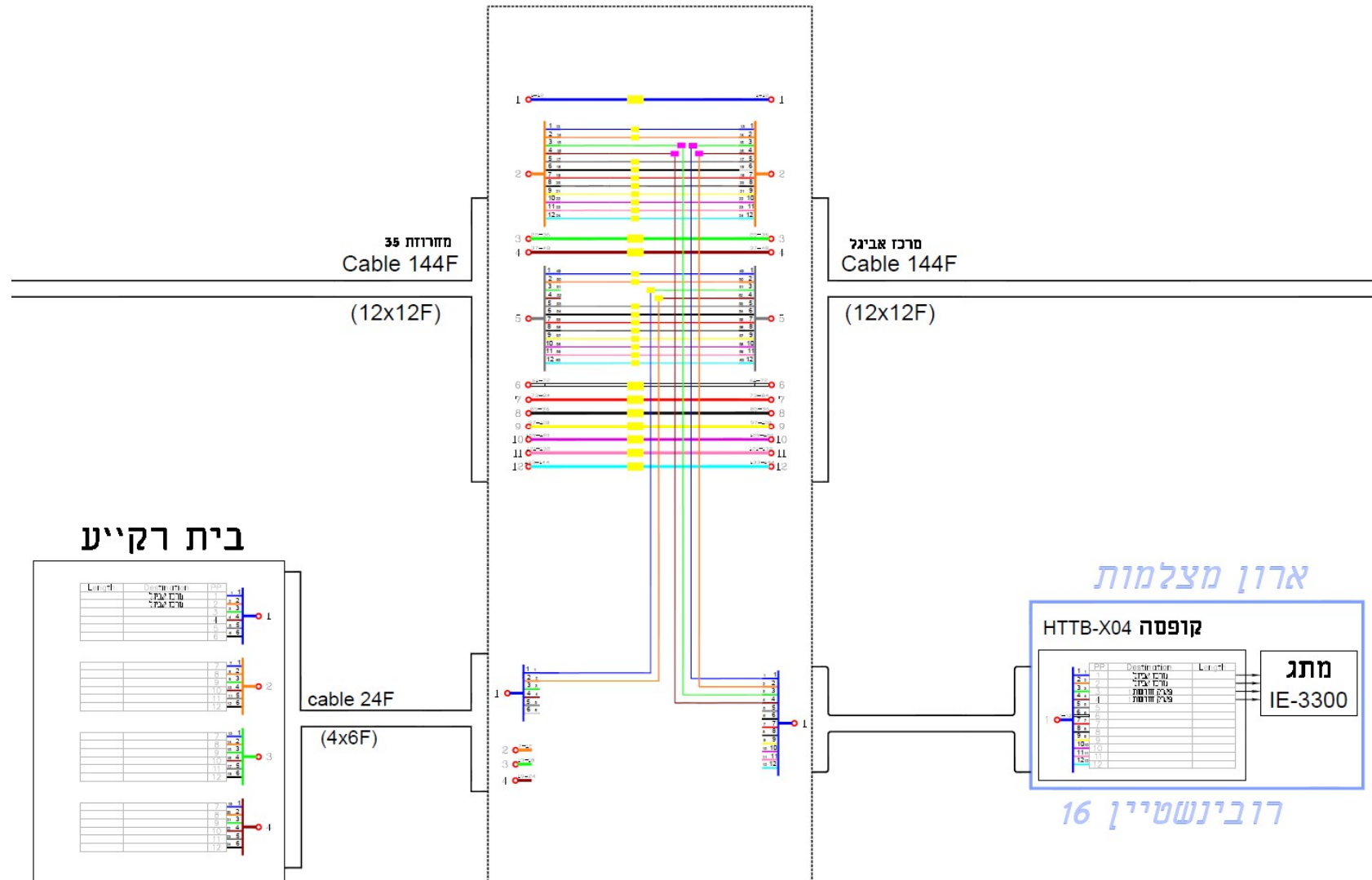


7.2 תמונה של קלוז'רים תמונה של קלוז'ר כניסה לאביגל

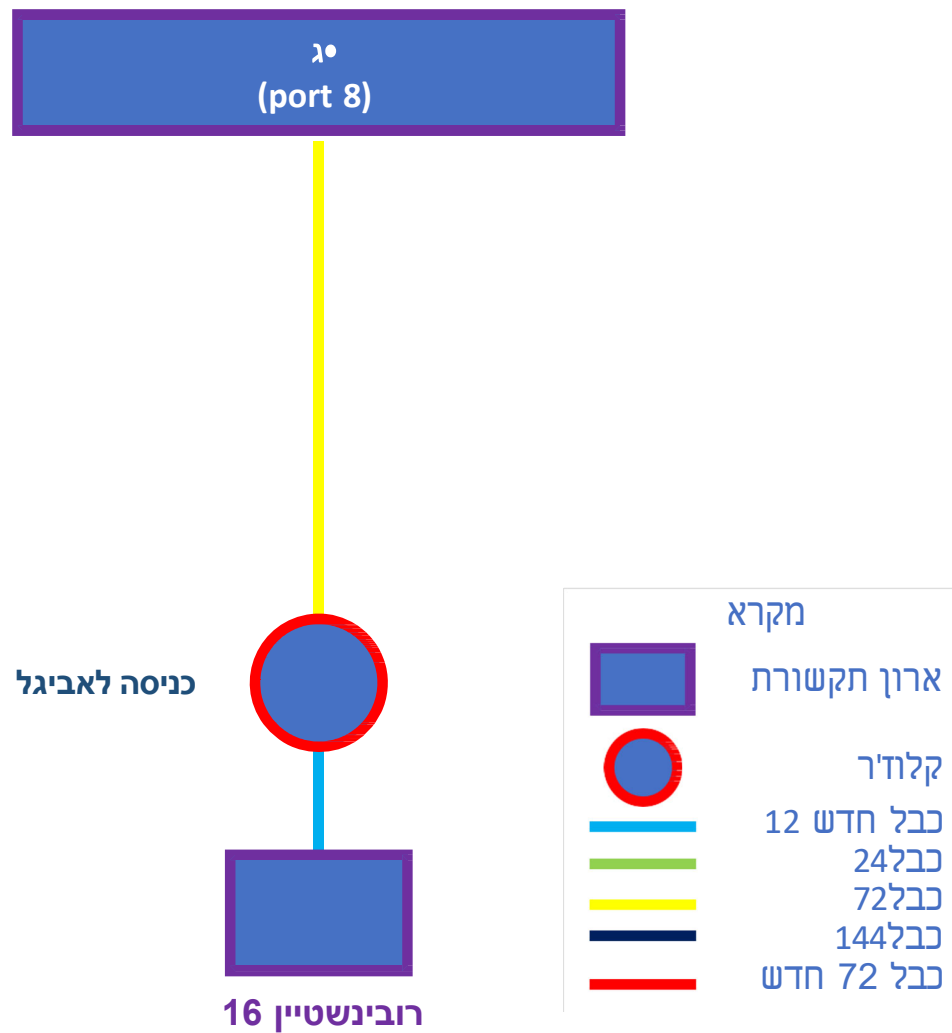


7.3 תכנית אופטית

כניסה לאביגל



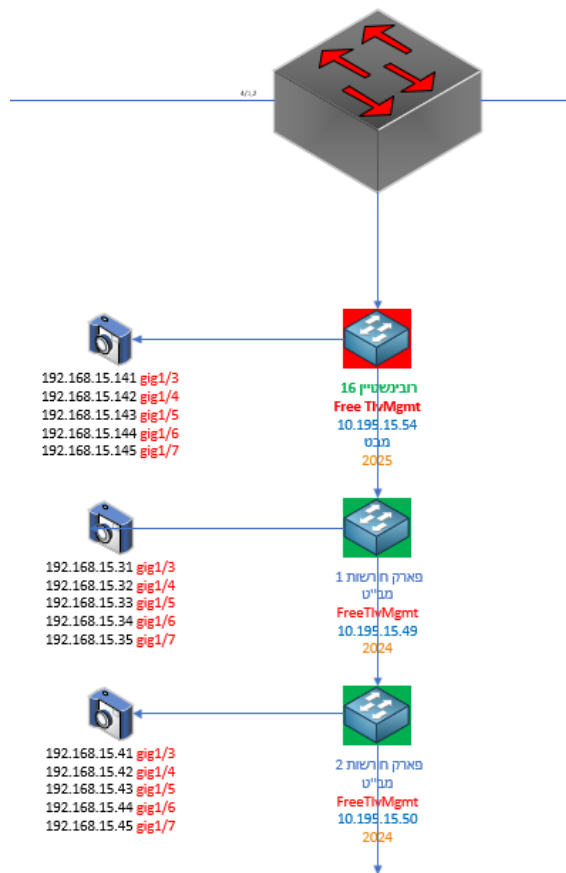
7.4 תרשים אופטיקה



8. תקשורת

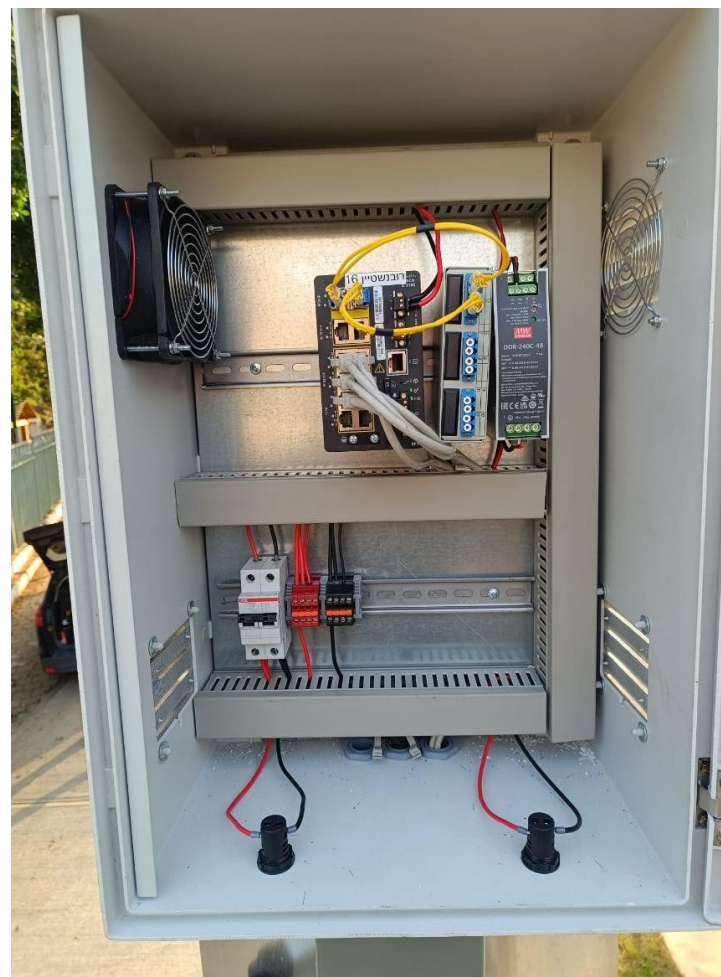
8.1 תרשים תקשורת (ארכיטקטורה של רשת עם כתובות)

אתר הפצה מרכז אביגל



9. פריסת מצלמות

9.1 התקנת ארון ומצלמות על העמוד רובינשטיין 16



9.2 מצלמות מעמוד



גינת בית רקע - רובינשטיין 16 - 1



גינת בית רקע - רובינשטיין 16 - 2



גינת בית רקע - רובינשטיין 16 - 3



גינת בית רקע - רובינשטיין 16 - 4



גינת בית רקע - רובינשטיין 16 - מח. 5

10. מפרט ציוד

מפרט מתג IE-3300

Features and Benefits

Table 1. IE3300 Features and Benefits

Feature	Benefit
Robust industrial design	- Built for harsh environments and temperature ranges (-40°C to +75°C) - Fanless, convection-cooled with no moving parts for extended durability - Hardened for vibration, shock and surge, and electrical noise immunity - Complies with multi-industry specifications for automation, ITS, and substation environments - Improves uptime, performance, and safety of industrial systems and equipment - Covers a wide range of Power over Ethernet (PoE) application requirements - Alarm I/O for monitoring and signaling to external equipment
Full Gigabit Ethernet interfaces	- Provides secure access for new high-speed applications in the industrial space - Packs up to 10 ports of GE - 2x1 Gigabit Small Form-Factor Pluggable (SFP) uplinks plus 8x1 Gigabit copper RJ45 downlink ports (with PoE+ or non PoE) in a small form-factor base system - Expandable to 26 ports of GE by attaching one of 7 compatible modules (copper, PoE, fiber options) - Connects high-speed wireless access points (802.11n, 802.11ac) - Enables High-Definition (HD) IP cameras and Programmable Logic Controllers (PLC) - Delivers multiple rings and redundant ring topologies for new network configurations - Extends geographical scalability where longer-distance connectivity is required
High-density industrial Power over Ethernet (PoE)	- Supports up to 24 PoE/PoE+ ports [Power budget - 360W] - Controls costs by limiting wiring, distribution panels, and circuit breakers - Reduces equipment needs, thus requiring less space and reducing heat dissipation - Enables ready-to-use PoE devices, such as IP phones, cameras, and wireless access points
User-friendly GUI, called WebUI	- Allows for easy configuration and monitoring - Eliminates the need for more complex, terminal emulation programs - Reduces the cost of deployment
SwapDrive for zero-configuration replacement	- True zero-configuration and simple switch replacement in the event of a failure - No networking expertise required - Helps ensure fast recovery
Flexible NetFlow (FNF)	- Provides enhanced flow and threat visibility - Enables optimization of the network infrastructure, reduces operation costs, and improves capacity planning and security incident detection



מפרט של מצלמה קבועה

Camera		Network	
Image sensor	CMOS	PoE Class	3
Image sensor size	1/2.8	Security	
Lightfinder	Lightfinder 2.0	Signed firmware	✓
Wide dynamic range	Forensic WDR	Secure boot	✓
Min illumination/ light sensitivity (Color)	0.07 lux	General	
Min illumination/ light sensitivity (B/W)	0.01 lux	Remote focus	✓
Video		Remote zoom	✓
Max video resolution	1920x1080	Built-in IR	✓
Max frames per second	50/60	Local storage (memory card slot)	✓
Electronic image stabilization	-	Operating temperature	-40 to 60 °C
Lens		Outdoor Ready	✓
Focal length *	10.9 - 29 / 3 - 9 mm	Vandal rating	IK10
Optical zoom	-	IP rating	IP66, IP67
Horizontal field of view *	29-11 / 114-37 °	Designed for repaint	✓
Vertical field of view *	17-6.5 / 58-21 °	Sustainability	PVC free
Compression		Power	
Zipstream	✓	Power (max)	-
H.264	Baseline, High, Main	Power (average)	-
H.265	✓	Audio	
Motion JPEG	✓	Audio Support	✓

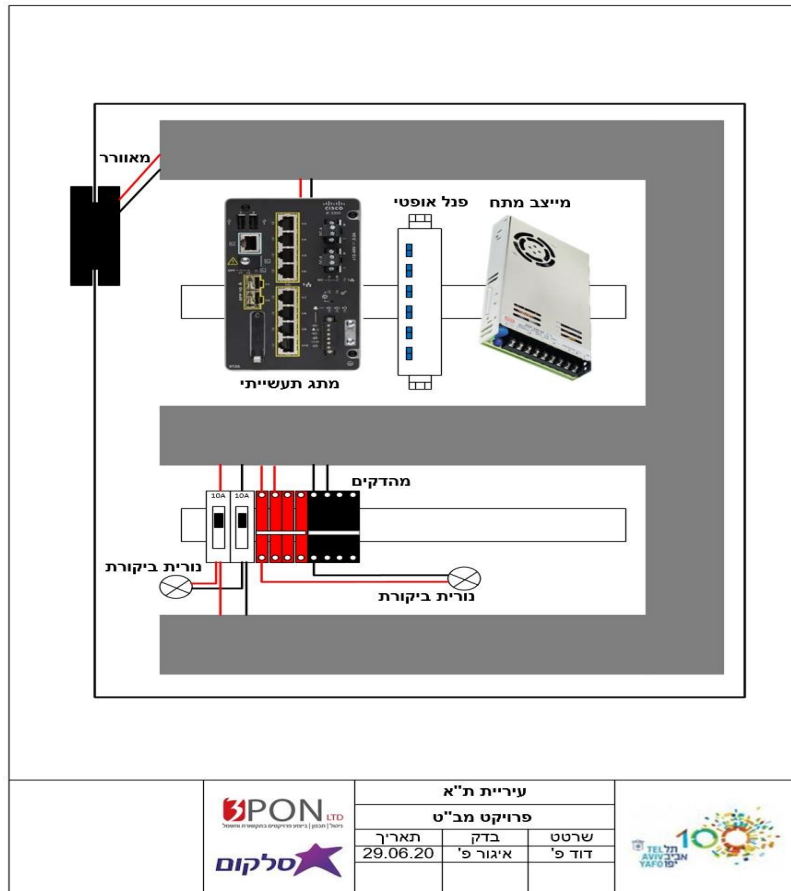


מפרט של מצלמה ממונעת PTZ

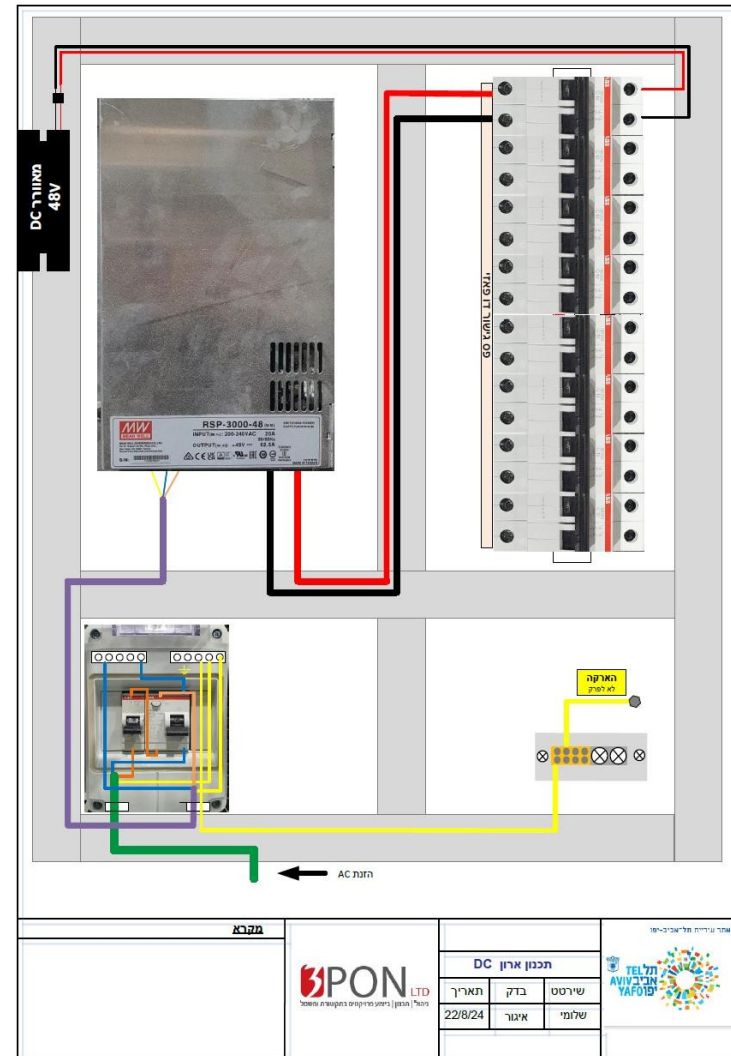
AXIS P5635-E Mk II PTZ Dome Network Camera	
Models	AXIS P5635-E Mk II 50 Hz AXIS P5635-E Mk II 60 Hz
Camera	
Image sensor	Progressive scan CMOS 1/2.8"
Lens	4.3–129 mm, F1.6–4.7 Horizontal field of view: 65.6°–2.0° Vertical field of view: 39.0°–1.2° Autofocus, auto-iris
Day and night	Automatically renewable infrared-cut filter
Minimum illumination	Color: 0.2 lux at 30 IRE F1.6 B&W: 0.01 lux at 30 IRE F1.6 Color: 0.25 lux at 50 IRE F1.6 B&W: 0.02 lux at 50 IRE F1.6
Shutter time	1/60000 to 2 s
Pan/Tilt/Zoom	Pan: 360° endless, 0.1°/s–350°/s Tilt: 180°, 0.1°/s–350°/s 30x optical zoom and 12x digital zoom, total 360x zoom 256 preset positions, e-stop, limited guard tour, control queue, on-screen directional indicator, set new pan 0°, focus window, speed zoom, focus recall
Video	
Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles Motion JPEG
Resolution	1920x1080 (HDTV 1080p) to 320x180
Frame rate	Up to 25/30 fps (50/60 Hz) in 1080p Up to 50/60 fps (50/60 Hz) in 720p
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Controllable frame rate and bandwidth Axis Zipstream technology in H.264 VBR/MBR H.264
Image settings	Compression, Color, Brightness, Sharpness, Contrast, Local contrast, White balance, Exposure control, Exposure zones, Automatic backlight compensation, Fine tuning of behavior at low light, 120 dB WDR – Forensic Capture, Manual shutter time, Text and image overlays, 20 individual 3D privacy masks, Image freeze on PTZ Electronic Image Stabilization
Audio	
Audio streaming	Two-way
Audio compression	AAC-LC 8/16 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz Configurable bit rate
Audio input/output	External microphone or line input, and line output (Requires Axis 10-pin Push-pull System Connector or Axis Multicable C I/O Audio Power 1 m/5 m, not included)
Network	
Security	Password protection, IP address filtering, HTTPS [®] encryption, IEEE 802.1X [®] network access control, Digest authentication, User access log, Centralized certificate management, brute force delay protection
Supported protocols	IPv4, IPv6, SSHv2, HTTP, HTTPS, SSL/TLS, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP [™] , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTP, RTSP, SRTP, TCP, UDP, ICMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, NetOP, LLDP
System integration	
Application Programming Interface	Open API for software integration, including VAPIX [®] and AXIS Camera Application Platform; specifications at www.axis.com AXIS Video Streaming System with One-Click Connection ONVIF Profile S and ONVIF Profile G, specification at www.axis.com
Analytics	Included AXIS Video Motion Detection Audio detection Support for AXIS Camera Application Platform enabling installation of third-party applications, see www.axis.com/ocap
Event triggers	Detectors: live stream access, video motion detection, shock detection, daylight mode, audio detection
Hardware	network, temperature Input Signal: manual trigger, virtual inputs, digital input signal PTZ: error, moving, preset reached, ready Storage: disruption, recording System: system ready Time: recurrence, use schedule
Event actions	Record video: SD card and network share Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share and email Pre- and post-alarm video or image buffering for recording or upload Notification: email, HTTP, HTTPS, TCP and SNMP trap PTZ: PTZ preset, start/stop guard tour Overlay text, external output activation, play audio clip, day/night mode
Data streaming	Event data
Built-in installation aids	Pixel counter
General	
Casing	IP66-, IK10- and NEMA 4X-rated Metal casing (aluminum), clear dome (PC), repaintable skin cover
Sustainability	PVC free
Memory	512 MB RAM, 256 MB Flash
Power	Axis PoE+ midspan 1-port: 100–240 V AC IEEE 802.3at Type 2 Class 4 Camera consumption: typical 8 W, max 21 W Multi-conductor cables: 20–28 V DC, typical 7 VA, max 20 VA 20–24 V AC, typical 12 VA, max 28 VA (PoE+ midspan or power supply not included)
Connectors	RJ45 for 10BASE-T/100BASE-TX PoE RJ45 Push-pull Connector (IP66) included I/O connector for DC or AC input, 4 configurable alarm inputs/outputs, mic in/line in, line out (Axis 10-pin Push-pull System Connector or Axis Multicable C I/O Audio Power 1 m/5 m, not included)
Storage	Support for SDHC UHS-VSDXC UHS-I card Support for SD card encryption Support for recording to network-attached storage (NAS) For SD card and NAS recommendations see www.axis.com
Operating conditions	–30 °C to 55 °C (–22 °F to 131 °F) Humidity 10–100% RH (condensing)
Storage conditions	–40 °C to 70 °C (–40 °F to 158 °F)
Approvals	EMC EN 55022 Class B, EN 61000-6-1, EN 61000-6-2, EN 55024, EN 50121-4, IEC 62236-4, FCC Part 15 Subpart B Class A+B, ICES-003 Class B, VCCI Class B, BCM AS/NZS CISPR22 Class B, KCC K22 Class B, K235 EN 61000-3-2, EN 61000-3-3 Safety IEC/EN/UL 60950-1, IEC/EN/UL 60950-22 Environment IEC/EN 60529 IP66, NEMA 250 Type 4X, IEC/EN 62282 IK10, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-28, ISO 4892-2 Network/IS1 SP500-267
Dimensions	217 x 188 x 188 mm (8 9/16 x 7 3/8 x 7 3/8 in)
Weight	2.5 kg (5.5 lb)
Included accessories	RJ45 Push-pull Connector (IP66), Hard ceiling mount, Spring pipe adaptor, U-profile pipe adaptor, Installation Guide, Windows decoder 1-user license, AXIS Authentication key
Optional accessories	AXIS TB18 Mounts, AXIS 1944QZL Inceps Mount, Outdoor RJ45 cable with pre-mounted connector, AXIS TB133 Midspan 30 W 1-port, Repaintable skin covers Smoked dome, Axis 10-pin Push-pull System Connector, Axis Multicable C I/O Audio Power 1 m/5 m
Video management software	AXIS Companion, AXIS Camera Station, Video management software from Axis Application Development Partners available at: www.axis.com/vms



מפרט של ארון תקשורת



מפרט של ארון DC





RSP-3000-48

AC-DC Single Output Enclosed power supply; Output 48VDC Single Output at 62.5A; PFC; forced air cooling

Specifications

Technical data		Information	
Brand	MEAN WELL	Commodity	8504408390
Item number	RSP-3000-48	Warranty pack	60 Months Bring-In
Series	RSP-3000	RoHS	Compliant
Description	AC-DC Single Output Enclosed power supply; Output 48VDC Single Output at 62.5A; PFC; forced air cooling	Packing quantity	4
Application	ITE EN/UL/IEC 60950	Net weight (gram)	3840
Technology	AC/DC		
Power Format	Box Type - Enclosed		
Output Power (W)	3000		
Output Voltage (V)	48		
Output Current (A)	62.5		
Input Voltage (V)	180 - 264		
IP Rating	No IP assigned		
Width (mm)	177.8		
Height (mm)	63.5		
Depth (mm)	278		
Control Signals	DC OK ON/OFF Remote Sense Vaux auxiliary		



11. אישור אתר

תאריך קבלת אתר: _____

שם נציג הלקוח: _____

חתימת הנציג: _____

מסמך זה נערך והוכן על ידי _____ לצורכי תיעוד