

# ASTRACOM<sup>®</sup>

*Professional Satellite Systems*

2022



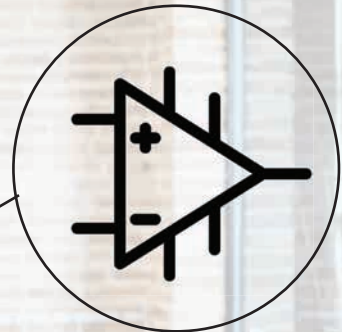
# 10 Series MX Multiswitch



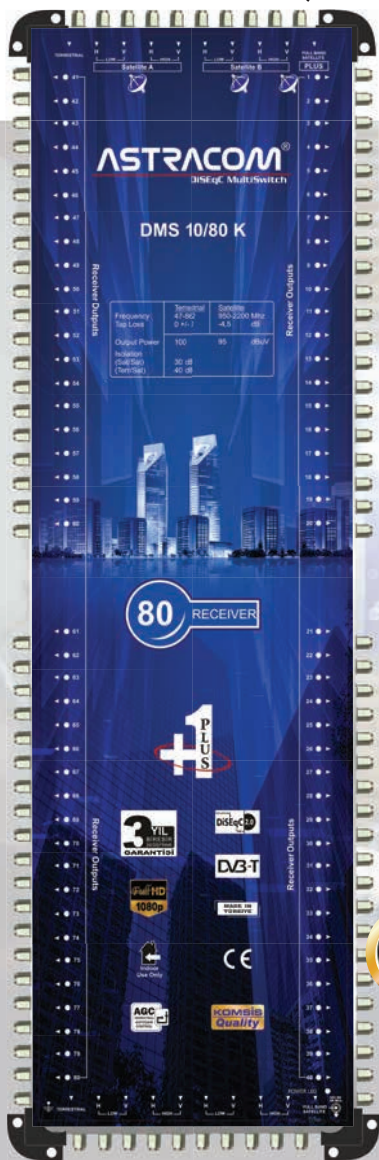
2+1 Satellite Input



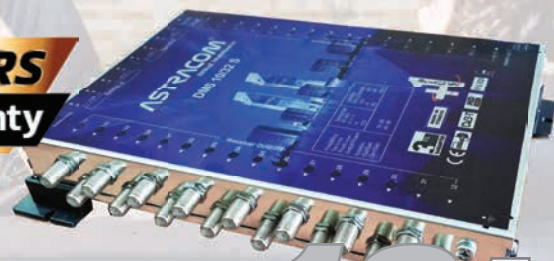
New cross connector alignment design allows easy installation



Strong signal with included amplifier



**3 YEARS**  
Warranty



# 10 MX

## 10 Series MX Multiswitch

- MX 10/ 8 End-Type - MX 10/ 8 Cascade
- MX 10/12 End-Type - MX 10/12 Cascade
- MX 10/16 End-Type - MX 10/16 Cascade
- MX 10/20 End-Type - MX 10/20 Cascade
- MX 10/24 End-Type - MX 10/24 Cascade
- MX 10/32 End-Type - MX 10/32 Cascade
- MX 10/40 End-Type - MX 10/40 Cascade
- MX 10/48 End-Type - MX 10/48 Cascade
- MX 10/56 End-Type - MX 10/56 Cascade
- MX 10/64 End-Type - MX 10/64 Cascade
- MX 10/72 End-Type - MX 10/72 Cascade
- MX 10/80 End-Type - MX 10/80 Cascade
- MX 10/100 End-Type - MX 10/100 Cascade
- MX 10/120 End-Type - MX 10/120 Cascade

### Satellite & Terrestrial

Inputs	8 Uydu +1 (10 Serisi) 16+1 (17 Serisi) 1 Terrestrial
Outputs	8 Uydu /Satellite +1 Plus (16+1 17 Series) (For Cascade models)
Tap Output	8,16,20,24,32,40,48,56,64,72,80,100,120 TV SAT
Frequency Band	47-862 MHz 950-2200MHz
Tap Loss	0+/-2 dB 0 dB
Trunk Loss (Cascade Types)	-4 dB -6 dB
Isolation	40 dB (TV)
Ports	30 dB (SAT)
Isolation Switching	30 dB
Output Power Terrestrial	100 dBuV (DIN45004B) Dahili Ga-As Mesfet Amplifier
Output Power SAT Switching	95 dBuV (IMD2 -35dB) DiSEqC 1.0 / 2.0 SAT A 13V/18V OKHz / 22KHz SAT A
DVB-C / DVB-T / HDTV	Compatible
Port Currents (For Each User)	Horizontal 47 mA Vertical 32 mA
LNB Supply	SMPS 16V/2A

**DiSEqC 2.0 Multiswitch**  
**2 Satellite Input**  
**+1 Satellite**  
**Terrestrial and Camera Input**



**DMS 10/8 S**  
**DMS 10/8 K**



**DMS 10/12 S**  
**DMS 10/12 K**

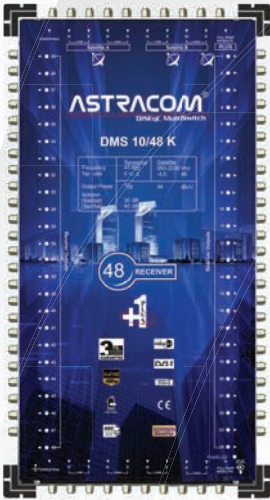


**DMS 10/16 S**  
**DMS 10/16 K**



**DMS 10/20 S**  
**DMS 10/20 K**

**DMS 10/48 S**  
**DMS 10/48 K**



**DMS 10/40 S**  
**DMS 10/40 K**



**DMS 10/32 S**  
**DMS 10/32 K**



**DMS 10/24 S**  
**DMS 10/24 K**



**DMS 10/56 S**  
**DMS 10/56 K**



**DMS 10/64 S**  
**DMS 10/64 K**



**DMS 10/72 S**  
**DMS 10/72 K**

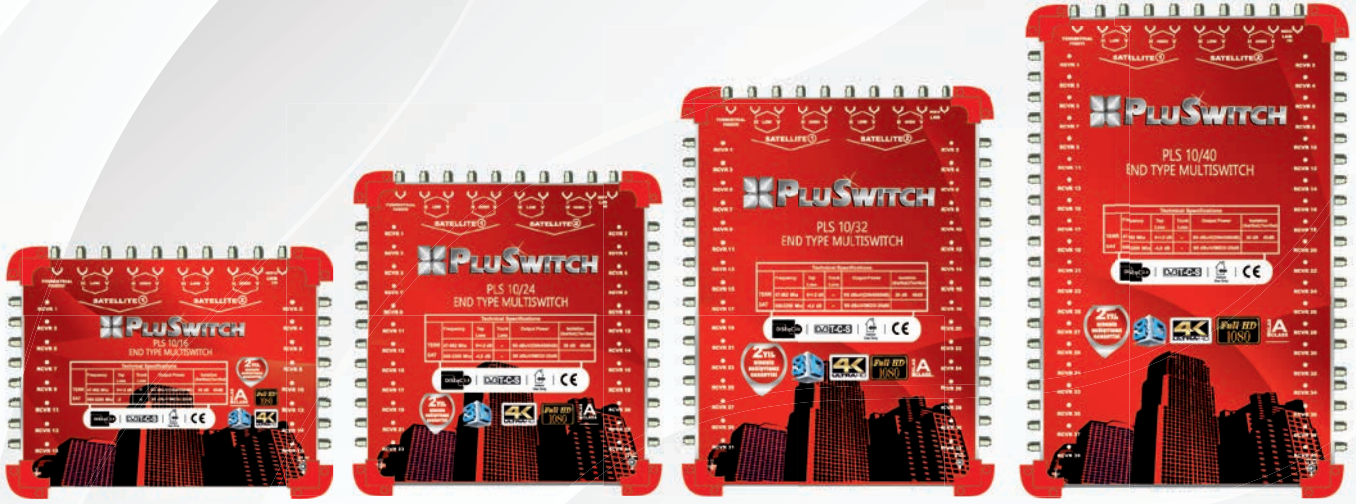


**DMS 10/80 S**  
**DMS 10/80 K**



# EKO Series PLS Multiswitch

## PLUSWITCH



PLS 10/16 S  
PLS 10/16 K

PLS 10/24 S  
PLS 10/24 K

PLS 10/32 S  
PLS 10/32 K

PLS 10/40 S  
PLS 10/40 K

**2 YEAR WARRANTY**

**10 EKO PLS**

### Satellite & Terrestrial

Inputs	8 Uydu +1 1 Terrestrial
Outputs	8 Satellite +1 Plus (for Cascade Models)
Tap Output	16,24,32,40 TV SAT 47-862 MHz 950-2200MHz
Frequency Band	-25 dB 0 dB
Tap Loss	-4 dB -6 dB
Trunk Loss	
Cascade Types)	40 dB (TV)
Isolation	30 dB (SAT)
Ports	30 dB
Isolation	
Switching	100 dBuV (DIN45004B)
Output Power	Pasif
Terrestrial	95 dBuV (IMD2 -35dB)
Output Power SAT	DiSEqC 1.0 / 2.0 SAT A
Switching	13V/18V OKHz / 22KHz SAT A
	Uyumlu /Compatible
DVB-C / DVB-T / HDTV	Horizontal 47 mA
Port Currents	Vertical 32 mA
For Each User	SMPS 16V/2A
LNB Supply	



### 10 Series PLS Multiswitch

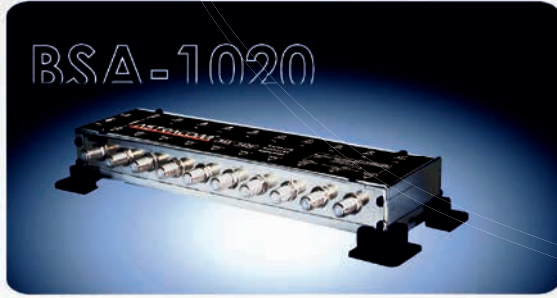
PLS 10/16 End-Type - PLS 10/16 Cascade

PLS 10/24 End-Type - PLS 10/24 Cascade

PLS 10/32 End-Type - PLS 10/32 Cascade

PLS 10/40 End-Type - PLS 10/40 Cascade

# Satellite IF Amplifiers



MODEL	BSA 1020 - BSA1720
Frekans Bandı/ Frequency Band	950-2250 MHz
Kazanç/Gain	
Üst Band/High Band	20 dB
Alt Band/Low Band	15 dB
Kazanç Hata Payı/ Gain Error Range	+/- 1 dB
Gürültü Figürü/Noise Figure	3 dB
Akm/Current	50 mA (450 mA Toplam)

MODEL	BSA 1020
• 9 Inputs, 9 Outputs, 1 Terrestrial In, 1 Terrestrial Out Amplifiers	
• Satellite Band Booster Amplifier overcomes cable and distribution losses with it's 5 dB slope, 20 dB gain. It also has level adjustment.	
• External SMPS power supply.	

MODEL	BSA1720
• 16 Inputs, 16 Outputs, 1 Terrestrial In, 1 Terrestrial Out Amplifiers	
• Satellite Band Booster Amplifier overcomes cable and distribution losses with it's 5 dB slope, 20 dB gain. It also has level adjustment.	
• External SMPS power supply.	



## ACTIVE SATELLITE & TERRESTRIAL TAP-OFF

- 1 Karasal Yayın Girişi/ 1 Terrestrial Input
- 9 Uydu IF Yayın Girişi/ 9 Satellite IF Inputs
- 1 Karasal & 9 Uydu IF Kaskat Çıkışı/ 1 Terrestrial & 9 Satellite IF Cascade Outputs
- 2 Terrestrial & 18 Uydu Yankol Çıkışı/ 2 Terrestrial & 18 Satellite IF Tap Off Satellite (KYA-10/20)
- 1 Karasal & 9 Satellite IF Tap Offfff Outputs/ 1 Terrestrial & 9 Satellite IF Tap-Offff Outputs (KYA-10/20)
- Kayıfsız sinyal Bölme/ Signal Splitting without signal loss
- Kaskat Kullanım Özelliği/ Cascadable Operation
- Harici Güç Kaynağı 16V/1A / External Power Supply 16V/1A

MODEL	KYA-10/20	KYA-10/10
Frekans Bandı/Frequency Band	950-2200 Mhz (SAT)	48-862 MH
Geçiş Kaybı/Insertion Loss	-1.2 dB	-0.5 dB
Yan Kol Kazancı/Tap Gain	+3 dB	+3 dB
Izolasyon/Isolation	SAT-SAT : 39 dB SAT-TERR : 42 dB TERR-SAT : 42 dB	
Çalışma Gerilimi/Supply Voltage	+16V DC	
Supply Current/Çalışma Akımı	430mA	
Ölçüler/Dimension	230x130x35 (mm)	



## TSA - 3535 Full Band Amplifier

Frequency Band	47-2200 MHz	
Gain	TV	SAT
	35dB	40dB
Output Power	118 dBuV	120 dBuV
Gain Linearity	+/- 1 dB	
Noise Figure	< 6 dB	
Gain Adjustment	20 dB	
Curve Adjustment	18 dB	15 dB
Test Connector Adjustment	- 20 dB	
Dimensions	214 x 110 x 55	

# 17 Series MX Multiswitch



# 17MX

## Satellite & Terrestrial

Inputs	8 SAT +1 (10 Series) 16+1 (17 Series)	
Outputs	1 Terrestrial 8 Satellite+1 Plus (16+1 17 Series) (for Cascade Models)	
Tap Output	8,16,20,24,32,40,48,56,64,72,80,100,120	
Frequency Band	TV	SAT
Tap Loss	47-862 MHz	950-2200MHz
Trunk Loss	0 +/- 2 dB	0 dB
Cascade Types)	-4 dB	-6 dB
Isolation		
Ports	40 dB (TV)	
Isolation	30 dB (SAT)	
Switching	30 dB	
Output Power		
Terrestrial	100 dBuV (DIN45004B)	
Output Power SAT	Internal Ga-As Mesfet Amplifier	
DiSEqC / Switching	95 dBuV (IMD2 -35dB) DiSEqC 1.0 / 2.0 SAT A	
DVB-C / DVB-T / HDTV	13V/18V 0KHz / 22KHz SAT A	
Port Currents	Compatible	
For Each User	Horizontal 47 mA Vertical 32 mA	
LNB Supply	SMPS 16V/2A	

## 17 Series MX Multiswitch

- MX 17/ 8 End-Type - MX 10/ 8 Cascade
- MX 17/12 End-Type - MX 17/12 Cascade
- MX 17/16 End-Type - MX 17/16 Cascade
- MX 17/20 End-Type - MX 17/20 Cascade
- MX 17/24 End-Type - MX 17/24 Cascade
- MX 17/32 End-Type - MX 17/32 Cascade

**DiSEqC 2.0 Multiswitch**  
**4 Satellite Input**  
**Terrestrial and Camera Input**



# Camera Modulator Multiswitch

Thanks to the built-in TV Modulator  
you do not need to use an external modulator  
to connect a camera to your system.



Microprocessor Controlled Design

Digital Channel Indicator

8 UHF Channel Option

PLL Controlled Channel Frequency

Fits PAL BG Standard

80 dBuV output power for each port

RCA Connectors for Audio & Video



RCA Connector Ports



Digital Channel Indicator

Dip Switch Based 8 Channel Memory

## Camera Modulators



MM-2169

Model	Mini DSB UHF TV Modulator	
Frekans Bandı	470-862 MHz (C21 - C69)	
Çıkışları	1 RF Çıkışı	F Tipi Dişi Konnektör
Girişler	1 RF Girişi (47 - 862 MHz)	F Tipi Dişi
	Video Girişi	RCA Konnektör
	Ses Girişi	RCA Konnektör
RF Geçiş Kaybı	-3.5 dB	-3.5 dB
Çıkış Seviyesi	80 dBuV	
RF Seviye Ayarı	20 dB	
Video Giriş Seviyesi	1 Vpp 75 Ohm	
Ses Giriş Seviyesi	500 mV 10k Ohm	
Display	2 Adet 7 Segment	
Kanal Ayarı	PLL Kontrollü	2 Adet Buton ile
Besleme Gerilimi	+5V DC 250 mA	Harici Adaptör
Mekanik Yapı / Housing	Elektrostatik Boyalı Metal Kutu	

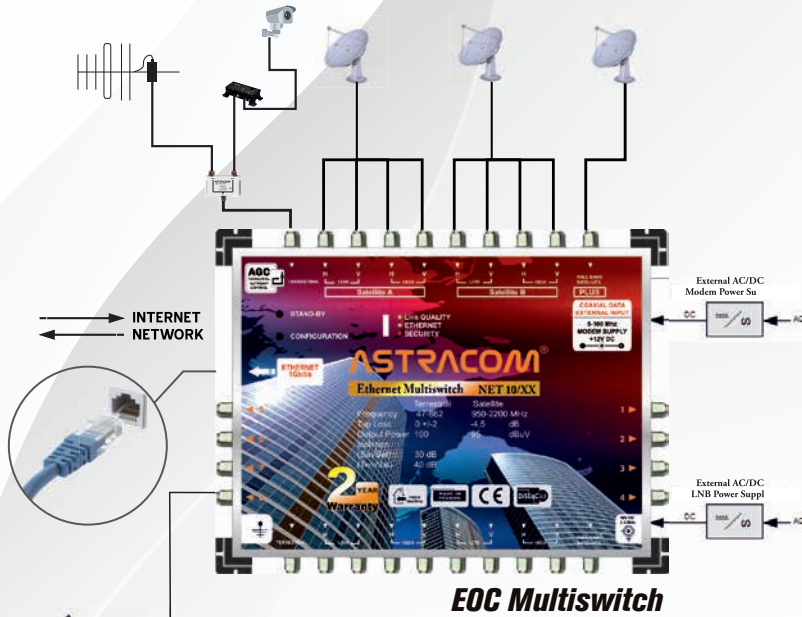


MK-1069

Model	MK 1069	
Frekans Bandı	168.25 - 855.25 MHz (S10-C69) 90 Kanal	
Çıkışları	1 RF Çıkışı	F Tipi Dişi Konnektör
Girişler	1 RF Girişi (47 - 862 MHz)	F Tipi Dişi
	Video Girişi	RCA Konnektör
	Ses Girişi	RCA Konnektör
RF Geçiş Kaybı	-3.5 dB	-3.5 dB
Çıkış Seviyesi	80 dBuV	
RF Seviye Ayarı	20 dB	
Video Giriş Seviyesi	1 Vpp 75 Ohm	
Ses Giriş Seviyesi	500 mV 10k Ohm	
Display	2 Adet 7 Segment	
Kanal Ayarı	PLL Kontrollü	2 Adet Buton ile
Besleme Gerilimi	+5V DC 250 mA	Harici Adaptör
Mekanik Yapı / Housing	Elektrostatik Boyalı Metal Kutu	

# EoC Internet Distribution Systems

## Ethernet over Coaxial



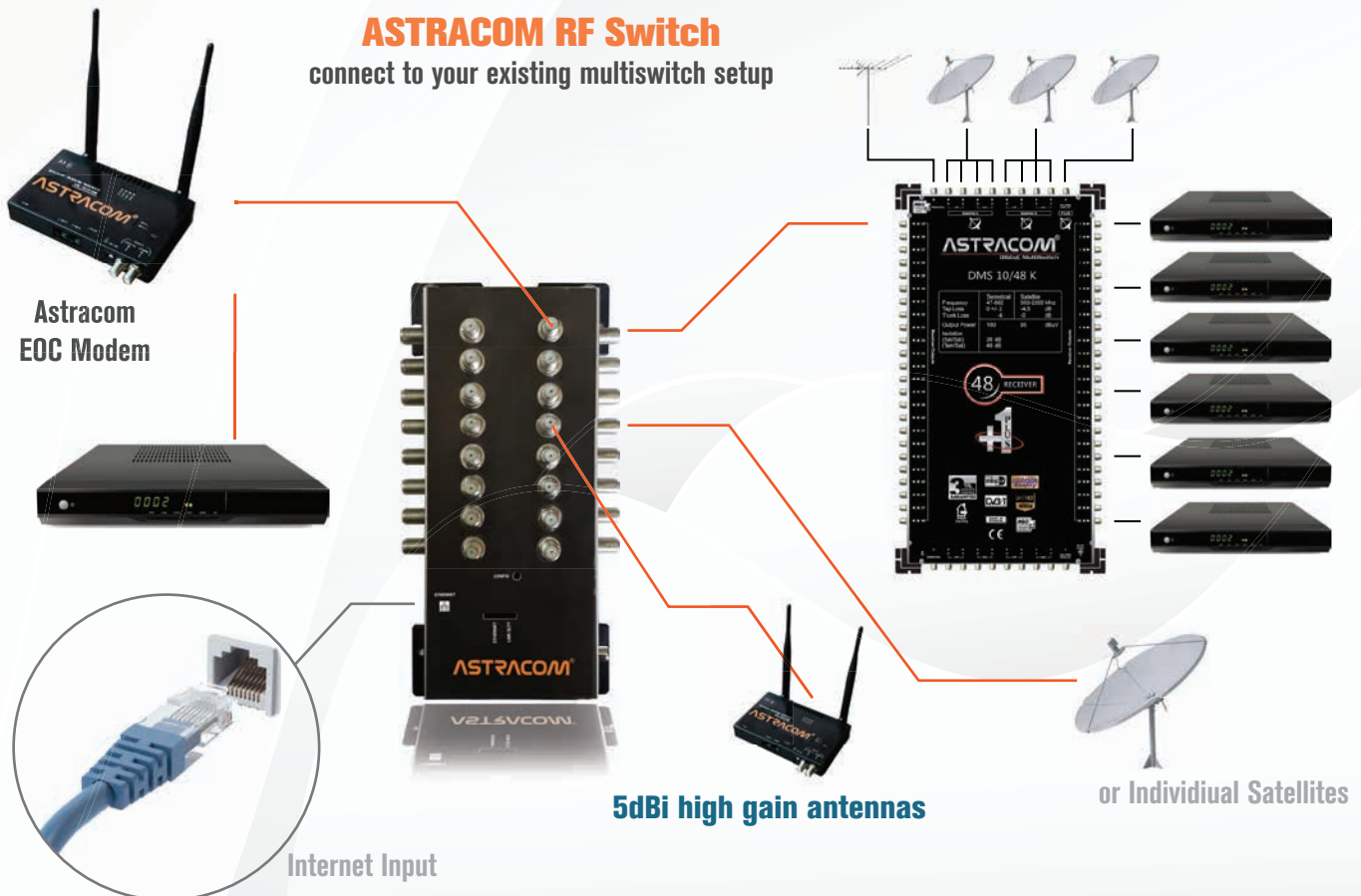
**Inject Internet over your TV Signal**

**ASTRACOM EoC Multiswitch** easily distribute internet signal by using your existing coaxial infustructure without extra cable work.

**You can even connect to your existing multiswitch setups!**



**ASTRACOM RF Switch**  
connect to your existing multiswitch setup





# Routers

Stronger Wifi



## MD-EOC-302G Router 300Mbit



Coaxial to Ethernet Speed: 1 Gbit/s  
Gbit Tranciever: Mevcut  
RF Ports: 2  
Input: 5 -2150 MHz  
Output : 126 – 2150 MHz  
Impedance: 75 Ohm  
Connector Type: F-Female  
RF Ports DC Pass: Yes  
In&Out Insertion Loss: -2dB uV  
Modulation Type: OFDM  
Indicators: ETH, LINK QUALITY  
Operating Temps: 0 – +45  
Storage Temps: -40 – +70

Wi-Fi Section  
CPU: 300 Mbps  
Bandwidth: 20 / 40 MHz  
RAM: DDR2 512 MB  
Flash: 8 MB  
LAN PORTS: 2  
WAN PORT: 1 (Koaksiyel) / (Coaxial)  
LEDS: WiFi, WAN, LAN Ports  
Dimensions: 110 x 155 x 24 mm  
(170mm antenna)  
Standard: IEEE 802.3, 802.3u,  
802.11b, 802.11g and 802.11n

## MD-EOC-302 Router 300Mbit



Coaxial to Ethernet Speed: 150Mbit/s  
Gbit Tranciever: Yes  
RF Ports: 2  
Input: 5 -2150 MHz  
Output : 126 – 2150 MHz  
Impedance: 75 Ohm  
Connector Type: F-Female  
RF Ports DC Pass: Yes  
In&Out Insertion Loss: -2dB uV  
Modulation Type: OFDM  
Indicators: ETH, LINK QUALITY  
Operating Temps: 0 – +45  
Storage Temps: -40 – +70

Wi-Fi Section  
CPU: 300 Mbps  
Bandwidth: 20 / 40 MHz  
RAM: DDR2 512 MB  
Flash: 8 MB  
LAN PORTS: 2  
WAN PORT: 1 (Coaxial)  
LEDS: WiFi, WAN, LAN Ports  
Antennas: 5 dBi High Gain Dual Antenna  
Dimensions: 110 x 155 x 24 mm  
(170mm antenna)  
Standard: IEEE 802.3, 802.3u,  
802.11b, 802.11g and 802.11n

## MD-EOC-301 Router 150Mbit



Coaxial to Ethernet Speed: 150 Mbit/s  
Gbit Tranciever: Mevcut  
RF Ports: 2  
Input: 5 -2150 MHz  
Output : 126 – 2150 MHz  
Impedance: 75 Ohm  
Connector Type: F-Female  
RF Ports DC Pass: Evet / Yes  
In&Out Insertion Loss: -2dB uV  
Modulation Type: OFDM  
Indicators: ETH, LINK QUALITY  
Operating Temps: 0 – +45  
Storage Temps: -40 – +70

Wi-Fi Section  
CPU: 300 Mbps  
Bandwidth: 20 / 40 MHz  
RAM: DDR2 512 MB  
Flash: 8 MB  
LAN PORTS: 2  
WAN PORT: 1(Coaxial)  
LEDS: WiFi, WAN, LAN Ports  
Antenna: 3 dBi  
Dimensions: 110 x 155 x 24 mm  
(90mm antenna)  
Standard: IEEE 802.3, 802.3u,  
802.11b, 802.11g and 802.11n

## ETH-401 PoE Router 300Mbit



Wi-Fi Section  
CPU: 300 Mbps  
Bandwidth: 20 / 40 MHz  
RAM: DDR2 512 MB  
Flash: 8 MB  
LAN PORTS: 4  
WAN PORT: 1  
LEDS: WiFi, WAN, LAN Ports  
Antennas: 5 dBi High Gain Dual Antenna  
Dimensions: 110 x 155 x 24 mm  
(170mm antenna)  
Standard: IEEE 802.3, 802.3u,  
802.11b, 802.11g and 802.11n

PoE Output: 24V 1A (WAN PORT)  
DC Supply Input: 24V 1A

Operating Temps: 0 – +45  
Storage Temps: -40 – +70



Dual Antenna Design

# EoC Switches



## GBit RF-Switch 16 Port

Interface: 1x Gbit  
RF Port Specs:  
Quantity: 16 Input – 16 Output  
Frequency Band:  
126 – 2150 MHz High Pass  
5 – 100 MHz Low Pass  
Internal Splitter: 16 Port  
Impedance: 75 Ohm  
Connector Type: F – female  
RF Port DC Pass: YES  
Modulation Type: OFDM  
Output Power: 80 dB uV  
Mod: MASTER  
Slave (Router) Support: 16 Nodes

Power Supply Requirements: 12V – 1A  
Indicators:  
ETH (Ethernet), LQ (Link Quality)  
Operating Temp:  
0 - +45 Degree Celcius  
Storage Temp:  
-40 - +70 Degree Celcius  
Housing: Electro Static Paint Metal Box  
Dimensions: 108 x 225 x 50 mm



## RF-Switch 16 Port

Interface: 100MBit  
RF Port Specs:  
Quantity: 16 Input – 16 Output  
Frequency Band:  
126 – 2150 MHz High Pass  
5 – 100 MHz Low Pass  
Internal Splitter: 16 Port  
Impedance: 75 Ohm  
Connector Type: F – female  
RF Port DC Pass: YES  
Modulation Type: OFDM  
Output Power: 80 dB uV  
Mod: MASTER  
Slave (Router) Support: 16 Nodes

Power Supply Requirements: 12V – 1A  
LED Indicators:  
ETH (Ethernet), LQ (Link Quality)  
Operating Temp:  
0 - +45 Degree Celcius  
Storage Temp:  
-40 - +70 Degree Celcius  
Housing: Electro Static Paint Metal Box  
Dimensions: 108 x 225 x 50 mm



## GBit RF-Switch 8 Port

Ethernet Interface: 1x Gbit  
RF Port Specs:  
Quantity: 8 Giriş Input – 8 Output  
Frequency Band:  
126 – 2150 MHz High Pass  
5 – 100 MHz Low Pass  
Internal Splitter: 8 Port  
Impedance: 75 Ohm  
Connector Type: F – female  
RF Port DC Pass: YES  
Modulation Type: OFDM  
Output Power: 80 dB uV  
Mod: MASTER  
Slave (Router) Support: 8 Nodes

Power Supply Requirements: 12V – 1A  
LED Indicators:  
ETH (Ethernet), LQ (Link Quality)  
Operating Temp:  
0 - +45 Degree Celcius  
Storage Temp:  
-40 - +70 Degree Celcius  
Housing: Electro Static Paint Metal Box  
Dimensions: 108 x 160 x 50 mm



## RF-Switch 8 Port

Ethernet Interface: 100MBit  
RF Port Specs:  
Quantity: 8 Input – 8 Output  
Frequency Band:  
126 – 2150 MHz High Pass  
5 – 100 MHz Low Pass  
Internal Splitter: 8 Port  
Impedance: 75 Ohm  
Connector Type: F – female  
RF Port DC Pass: YES  
Modulation Type: OFDM  
Output Power: 80 dB uV  
Mod: MASTER  
Slave (Router) Support: 8 Nodes

Power Supply Requirements: 12V – 1A  
LED Indicators:  
ETH (Ethernet), LQ (Link Quality)  
Operating Temp:  
0 - +45 Degree Celcius  
Storage Temp:  
-40 - +70 Degree Celcius  
Housing: Electro Static Paint Metal Box  
Dimensions: 108 x 160 x 50 mm

# EoC10

## 8-16-24-32 Port

### Gbit EoC-Multiswitch

2 YIL  
BİRE BİR DEĞİŞİM  
GARANTİSİ



- 1 Gbit/s Ethernet Interface
- 100 Mhz Coaxial G.hn Modem
- IEEE 9960-9961 Standard Compatible
- Terrestrial-Internet Isolation Filter
- RF Connection Quality LED Indicator
- Ethernet Connection Led Indicator
- Configuration Button
- Security LED
- DC 9-12V / 1A External Power supply

### Coaxial to Ethernet Converter

#### MD-EoC-101G



Ethernet Interface: 1x Gbit / 100MBit  
RF Ports Specs:  
Quantity: 2 (Input & Output)  
Input Port Frequency: 5 – 2150 MHz (ETH + TV + SAT)  
Output Port Frequency: 126 – 2150 MHz (TV + SAT)  
Giriş & Çıkış Kaybı /IN&OUT Insertion Loss: -2 dB  
Impedance: 75 Ohm  
Connector Type: F – Female  
RF Port DC Pass: YES  
Output Power: 100 dB uV (Master Mode)

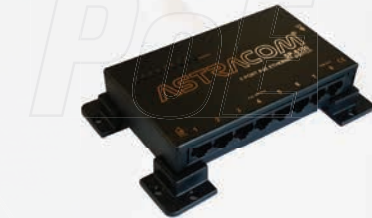
Modulation Type: OFDM  
Mode: Master / Slave  
Housing:  
Electro Static Paint Metal Box  
Power Supply: 12V – 1A  
Led Indicators:  
ETH (Ethernet), LQ (Link Quality)  
Operating Temp:  
0 - +45 Degree Celcius  
Storage Temp:  
-40 - +70 Degree Celcius  
Dimensions: 68 x 82 x 25 mm

#### MD-EoC-101

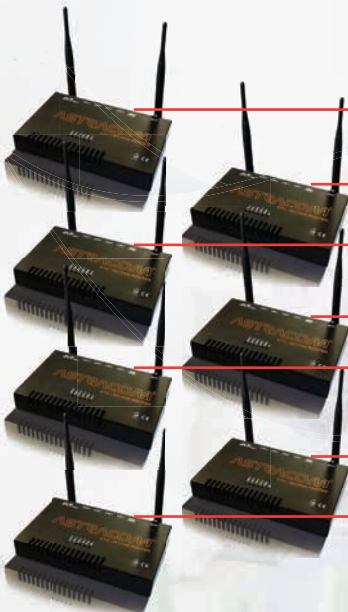
### Power over Ethernet

#### SP-8100 PoE Switch 8 Port

# PoE



Ethernet Interface: 7 x 100 MBit PoE Input  
1 x 100 MBit PoE Output  
  
24V 1A DC Power Supply  
24V 1A DC PoE Output  
  
9 LED Indicators



Routers provide 24V to PoE Switch over WAN Ports.  
Even if only 1 router is on, both switch, and radio  
link is powered by PoE.

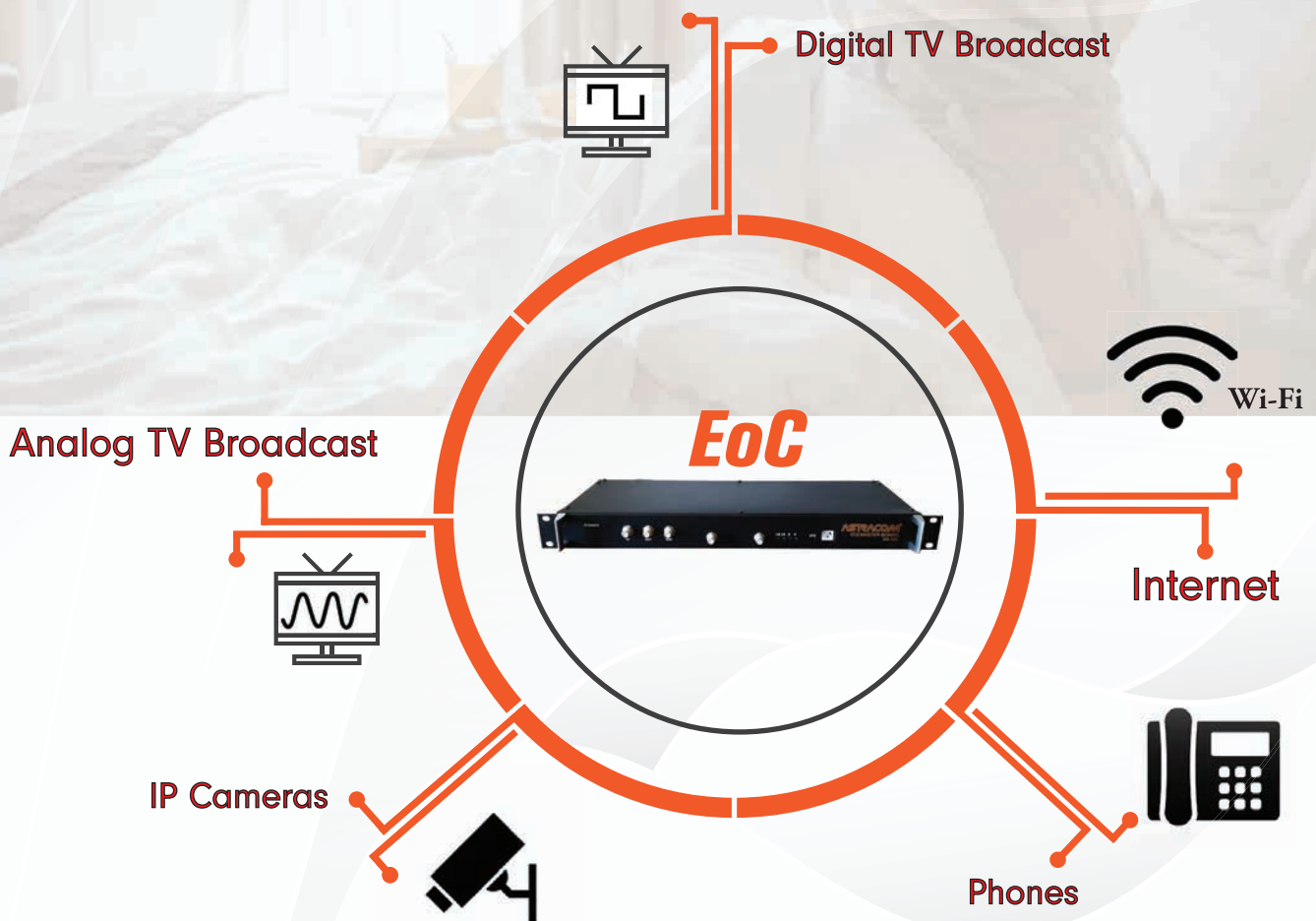
#### MD-401 PoE Router

# Internet & TV Systems for Hotels

## INTERNET AND DIGITAL TV BROADCAST ON THE SAME CABLE

Distribute Internet and Digital QAM TV Broadcast over your existing Coaxial Cable Infrastructure and remove your CAT5/CAT6 cable installation expenses

What can you distribute using the existing coaxial cable infrastructure?



With EOC (Ethernet over Coaxial) technology, Internet, TV, IP Cameras, and Voice over IP (VoIP) systems can work simultaneously over the same Coaxial TV cables

## EoC MasterBoard MA-100



**Arayüzler /Interfaces:** 1x Gbit  
3x RF Diplexer Filter  
1x RF Output Port  
1x RF Output Test Port

**Göstergeler /Indicators:** Link Quality Led (x2)  
Security Led (x1)  
Ethernet Activity Led (x1)  
Power LED (x1)

### ELECTRICAL SPECIFICATIONS

**Frekans Bandı / Frequency Band**  
Master Board RF Output 5-100 Mhz  
Diplexer Filter Output 5-862 MHz  
Filter isolations -35 dB  
Filter Loss -1,5 dB  
RF Output Power: 110dBuV  
Impedance: 75 Ohm  
RF Connectors: F-Female (Dişi)  
Power Supply: Internal AC/DC Converter  
Power Supply Input: 110-220V AC 50-60 Hz  
Mekanik Yapı / Housing: 19" 1U Rack Type Housing

## EoC Repeater RMA-100



**Arayüzler /Interfaces:**  
Downstream:  
1x GBit Ethernet Port  
1x Diplexer Filter  
1x EoC RF Output

**Upstream:**  
1x Diplexer Filter  
1x GBit Ethernet Port  
1x Master EOC RF Output  
1x Master EOC RF Test Port

**Göstergeler /Indicators:**  
Upstream:  
Link Quality Led (x2)  
Security Led (x1)  
Ethernet Activity Led (x1)

**Downstream:**  
Link Quality Led (x2)  
Security Led (x1)  
Ethernet Activity Led (x1)

### ELECTRICAL SPECIFICATIONS

**Frekans Bandı / Frequency Band**  
Master Board RF Output 5-100 Mhz  
Diplexer Filter Output 5-862 MHz  
Filter isolations -35 dB  
Filter Loss -1,5 dB  
RF Output Power: 110dBuV  
Impedance: 75 Ohm  
RF Connectors: F-Female (Dişi)  
Power Supply: Internal AC/DC Converter  
Power Supply Input: 110-220V AC 50-60 Hz  
Mekanik Yapı / Housing: 60 x 190 x 330mm Housing

## MD-EOC-301 Router 150Mbit



**Koaksiyelden Ethernete Hız/**  
Coaxial to Ethernet Speed: 150 Mbit/s  
**Gbit Ethernet Alıcı /Gbit Tranciever: Mevcut**  
**RF Portları / RF Ports: 2**  
**Giriş / Input: 5 -2150 MHz**  
**Çıkış / Output : 126 - 2150 MHz**  
**Empedans / Impedance: 75 Ohm**  
**Konnektör Tipi / Connector Type: F-Female**  
**RF Ports DC Pass: Evet / Yes**  
**Giriş-Çıkış Kaybı / In&Out Insertion Loss: -2dB uV**  
**Modülasyon Tipi / Modulation Type: OFDM**  
**Led Göstergeleri /Indicators: ETH, LINK QUALITY**  
**Çalışma Sıcaklığı / Operating Temps: 0 - +45**  
**Saklama Sıcaklığı / Storage Temps: -40 - +70**

**Router-WiFi Bölümü / Wi-Fi Section**  
**İşlemci / CPU: 300 Mbps**  
**WiFi Bantgenişliği /Bandwidth: 20 / 40 MHz**  
**Bellek / RAM: DDR2 512 MB**  
**Flash: 8 MB**  
**LAN PORTLARI /LAN PORTS: 2**  
**WAN PORTU /WAN PORT: 1 (Koaksiyel) / (Coaxial)**  
**LEDLER / LEDS: WiFi, WAN, LAN Ports**  
**Anten /Antenna: 3 dBi**  
**Boyut / Dimensions: 110 x 155 x 24 mm**  
(90mm antenna)  
**Standard: IEEE 802.3, 802.3u,**  
802.11b, 802.11g and 802.11n

# Headend Systems

## CS-5000 ES/SSB SINGLE SIDE BAND



32 Channel ES / SSB



40 Channel ES / SSB

Modülasyon/Modulation	Tek Yan Band/Single Side Band
Modülatör Sayısı/Modulator Quantity	Max.8 Adet/Max. 8 Unit
Tv Standardı/Tv Standard	PAL B/G
Çalışma Bandı/Operation Band	Full TV Band 48-862 Mhz AGILE System (Kanal Filtresi Gerektirmez) (Channel filter not required.)
Resim/Image	13 dB
Ses Taşıyıcı Oranı/Audio Carrier Ratio	
C/N Oranı/C/N Ratio	>60 dB
Çıkış Kanal Seçimi/ Output Channel Selection	PLL (Mikro İşlemci Kontrollü) (Microprocessor controlled)
Kanal Göstergesi/Channel Display	İki Kademeli LED Display (2 Step LED Display)
Çıkış Seviye Ayan/ Output Level Adjustment	-20 dB
Eğim/Equalizer Level Adjutment	-20 dB
Birleşik Çıkış Seviyesi/ Combinet Output Level(DIN 45004B)	124 dBuV(Power Amplifier ile) (with Power Amplifier)
Birleşik Çıkış Seviyesi/ Combined Output Level	105 dBuV (Power Amplifier Level) (with Power Amplifier)
Audio Giriş/Audio Input	500mV
Video Giriş/Video Input(Composite)	1 Vpp 75 Ohm

## CS-5000 ED/DSB DUAL SIDE BAND



16 Channel ES / DSB



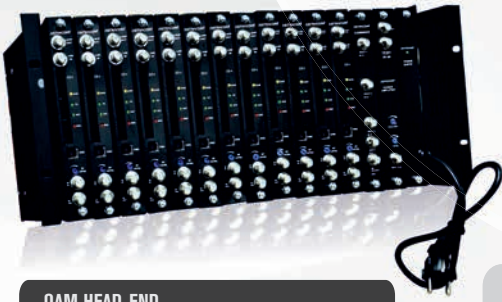
24 Channel ES / DSB

Modülasyon/Modulation	Çift Yan Band/Double Side Band
Modülatör Sayısı/Modulator Quantity	Max.8 Adet/Max. 8 Unit
Tv Standardı/Tv Standard	PAL B/G
Çalışma Bandı/Operation Band	Full TV Band 48-862 Mhz AGILE System (Kanal Filtresi Gerektirmez) (Channel filter not required.)
Resim/Image	13 dB
Ses Taşıyıcı Oranı/Audio Carrier Ratio	
C/N Oranı/C/N Ratio	>60 dB
Çıkış Kanal Seçimi/ Output Channel Selection	PLL (Mikro İşlemci Kontrollü) (Microprocessor controlled)
Kanal Göstergesi/Channel Display	İki Kademeli LED Display (2 Step LED Display)
Çıkış Seviye Ayan/ Output Level Adjustment	-20 dB
Eğim/Equalizer Level Adjutment	-20 dB
Birleşik Çıkış Seviyesi/ Combinet Output Level(DIN 45004B)	124 dBuV(Power Amplifier ile) (with Power Amplifier)
Birleşik Çıkış Seviyesi/ Combined Output Level	105 dBuV (Power Amplifier Level) (with Power Amplifier)
Audio Giriş/Audio Input	500mV
Video Giriş/Video Input(Composite)	1 Vpp 75 Ohm

- Headend systems are used for distribution applications of broadcasts received from different sources such as digital satellite, internal video broadcast, security cameras, in central satellite/TV distribution systems.
- Applies to all TV Standards.
- These are modular systems, each can be swapped individually.
- In case of malfunction, defected unit does not affect other channels.
- It provides easy use with microprocessor-controlled channel selection.

- A/V Inputs are protected. Power Amplifier provides strong output signal, and Filter Combiner Module provides lossless combination options.
- With the grouper options, it is possible to group from 2 channels to 10 channels.
- Provides high image quality on wide networks with channel filters designed for professional operations
- It is produced in two different groups, single side band and dual side band, with 19 inch rack cabinets or wall mounting feet.

# QAM Headend Systems



## QAM HEAD-END

- QAM modulation digital head-end
- Modular design (3U)
- 19" Rack compatible
- 8x transmodulator on single group
- Option to combine more than one group (with Filter Combiner)
- Internet Distribution Module (Optional)
- High power output amplifier

## QPSK / 8 PSK-QAM MODULATOR

Frequency Band	950 - 2200 MHz	Data Encoding	MPEG Standards
Input Signal	QPSK / 8PSK	DiSEqC Interface	2.0
Output Signal	256 QAM	LNB Power	13/18V 1A
Max. Symbol Rate	52 Mbps	USER Interface	USB 2.0 / PC Interface Windows

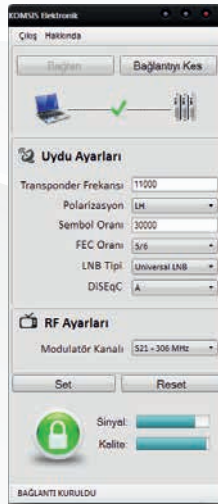
- Modulation Standard DVB-C J.83 A/AC20
- Max. QAM Mapping 256 QAM
- Input Signal MPEG / SPI Parallel
- Max. Input Data Rate 52 Mbit/s
- Output Signal QAM IF Output
- Data Recovery YES
- Output Signal Bandwidth 8 MHz
- Symbol Rate 6900
- C/N Ratio -55 dbi

## UPCONVERTOR PATH

- Technology Agile Full Band
- Frequency Band 300 - 862 MHz
- Channel Spacing 8 MHz
- Output Level 92 dBuV
- Level Adjustment -20 dB
- C/N Ratio -52 dB
- RF Input Interface 48 - 862 MHz



TRANSMODULATOR



GA-3400

## Distribution Amplifier

Frequency Band	48-862 MHz
Gain	34 dB
Output Level	(DIN45004B) 118 dBuV
Gain Linearity	+/- 1 dB
Noise Figure	< 6 dB
Gain Level	20 dB
Curve Level	20 dB
Test Connector Level	- 20 dB
Reflection Loss (75 Ohm)	< 12 dB
Dimensions	214 x 110 x 55



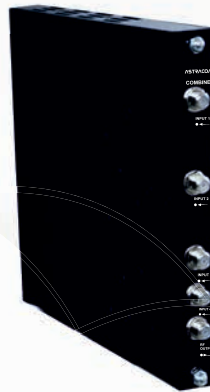
## Power Supply

Operation Range:	120-250V
Power	55 W
Output Voltage:	+5 V



## Amplifier

Frequency Band	48-862 MHz
Gain	20 dB
Frequency Linearity	+/- 1 dB
Output Level	118 dBuV
Noise Figure	< 5 dB
Gain Adjustment	0-20 dB
Reflect Loss	< 12 dB
Impedance	75 Ohm
Stabilizer	20 dB



## Combiner

Frequency Band	48-862 MHz
Combine Loss	-10 dB
Frequency Loss	+/- 1 dB
Reflect Loss	< 12 dB
Impedance	75 Ohm



GA-3215

## Distribution Amplifier

Frequency Band	48-862 MHz
Gain	32 dB ileri yön 15 dB geri yön
Output Level	(DIN45004B) 118 dBuV
Gain Linearity	+/- 1 dB
Noise Figure	< 6 dB
Gain Level	20 dB
Curve Level	20 dB
Test Connector Level	- 20 dB
Reflect Loss (75 Ohm)	< 12 dB
Dimensions	214 x 110 x 55

# ASTRACOM®

Professional Satellite Systems

