



## Subscribers Antennas for CDMA-450, IMT-2000, SkyLink

107497, Moscow Chernicinsky pr-d 7/1  
Tel.: (495) 775-43-19, 462-44-14  
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Model	Short description	Band, MHz
A3-CDMA	Vertical, collinear, PVC white, 0.84 m	453-467
DP1 UHF	Single folded dipole	400-490
Y5 CDMA	5-element yagi	453-467
LA-CDMA	Lowprofil, ABS	453-467
SS-1CDMA	Indoor, ceiling	453-467
SU-3CDMA	Subscriber wall mounting antenna	430-470

2009



## 430-468, 453-467 MHz Vertical antennas A3-70cm, A3- CDMA

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### Electrical specifications

Model	A3-CDMA	A3-70 cm
Operating frequency band, MHz	453-467	430-468
Gain, dBi	3	3
VSWR, not more than	1.5	1.5
Polarization		vertical
Max. power input, W	50	50
H-plane beamwidth	360°	360°
E-plane beamwidth	60°	60°
Impedance, Ohm	50	50

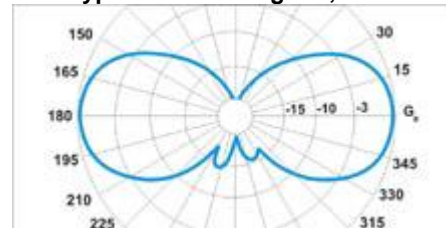
### Mechanical specifications

Model	A3-CDMA	A3-70 cm
Dimensions (LxWxH), mm	45x45x560	45x45x560
Weight, kg	0.3	0.3
Rated wind velocity, m/s	40	40
Radiator	copper	copper
Radome	white fiberglass	white fiberglass
Mounting	On a mast (35-70 mm) or on wall	
Connector	N-female	N-female

**A3-CDMA, A3-70cm antennas E-plane pattern**



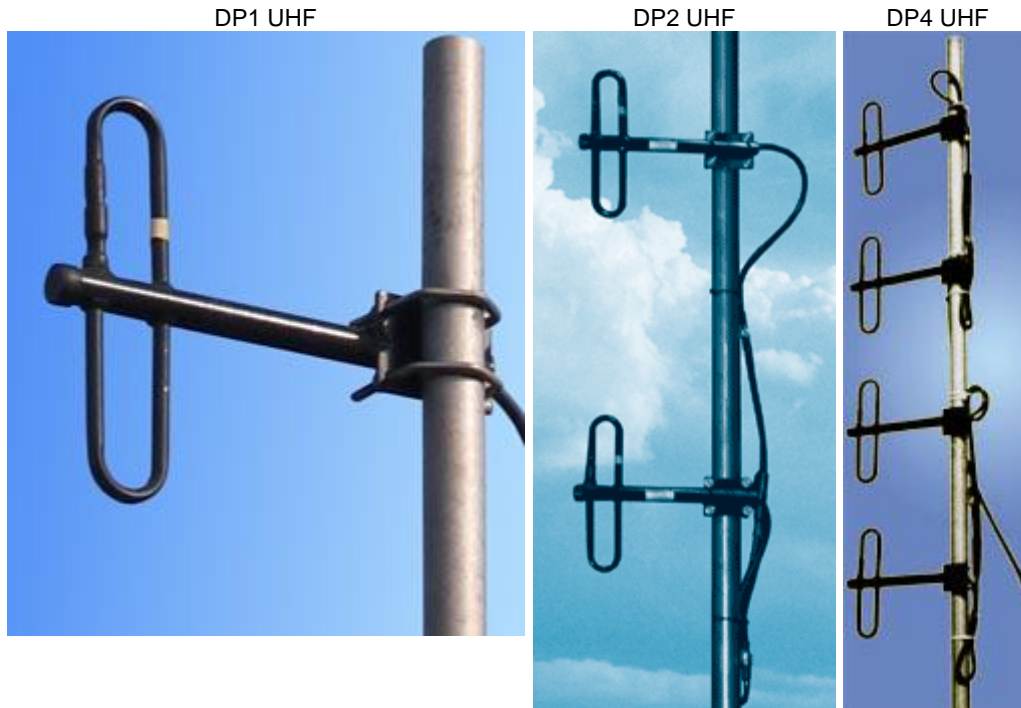
**Typical VSWR diagram, "A3"**





## 400-490 MHz Dipole antennas DP1 UHF, DP2 UHF, DP4 UHF

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### Electrical specifications

Model	DP1 UHF	DP2 UHF	DP4 UHF
Operating frequency band, MHz		400-490	
VSWR, not more than		1.5	
Gain OFFSET, dBi	5.15	8.15	11.15
Sector in vertical plane , -3dB	75°	37°	18°
Impedance, Ohm		50	
Max. power input, W	400	400	400

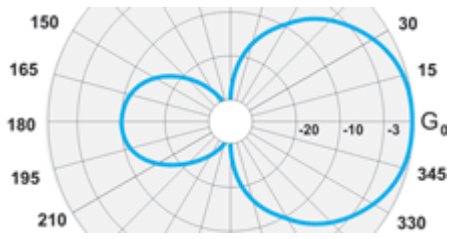
### Mechanical specifications

Model	DP1 UHF	DP2 UHF	DP4 UHF
Weight, kg	0.6	1.5	3.25
Height/Length, M	0.28	0.8	1.7
Construction material		Aluminium alloy	
Mast diametr, mm		25-55	
Rated wind velocity, m/s		55	
Wind loading area, m <sup>2</sup>	0.023	0.046	0.092
Load of side wind 45 m/s, H	26	52	104
Rated wind velocity with 0.5" icing, m/s		28	
Temperature range, °C		from -50 to +50	
Connector		N-female	

Antenna DP1 UHF represents all-welded nonseparable folded Pistolcors dipole. Antenna is designed exclusively for lateral mount on 25-55 mm diameter masts within  $1/4 \lambda$  distance from mast. Antenna has reliable polymeric coating, which protects from hostile environment. Antenna is used for array antenna manufacturing.

DP2 and DP4 UHF antenna represents collinear dipole system, with antenna DP1 UHF as the main structural component. These panel type array antennas are designed for mounting on radiopaque wide section towers, like television towers or chimney-stalks, to form different (mainly circular) patterns. Shipped together with adders TK-52U and TK-54U.

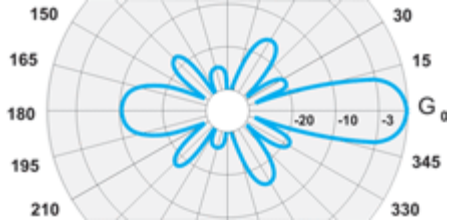
DP1 UHF E-plane pattern



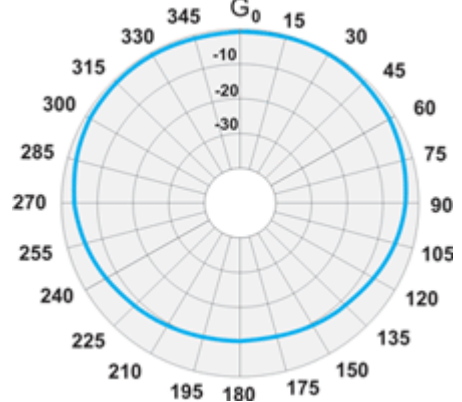
DP2 UHF E-plane pattern



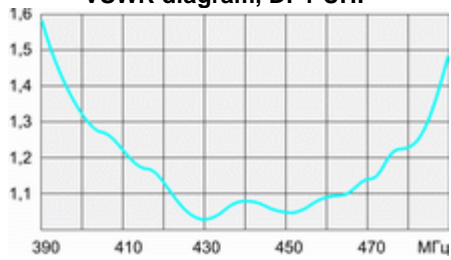
DP4 UHF E-plane pattern



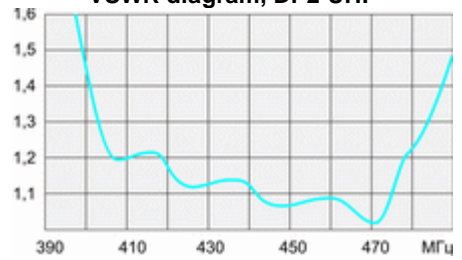
DP1 UHF H-plane pattern



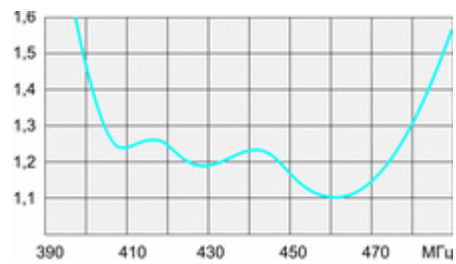
VSWR diagram, DP1 UHF



VSWR diagram, DP2 UHF



VSWR diagram, DP4 UHF





**453-467 MHz**  
**Directional antenna Y5-CDMA**  
**453-467 MHz,**  
**Y5-433 426-440 MHz,**  
**Y5-446 436-454 MHz**

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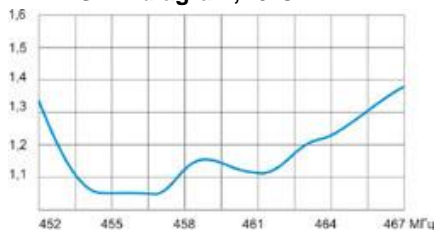
Electrical specifications

Model	Y5-CDMA	Y5-433	Y5-446
Operating frequency band, MHz	453-467	426-440	436-454
VSWR, not more than	1,5	1.5	1.5
Gain, dBi	8.15	8.15	8.15
Front-to-back ratio, dB	15	15	15
Sector , -3dB			
E-plane pattern	55°	55°	55°
H-plane	86°	86°	86°
Polarization	vertical	vertical	vertical
Impedance, Ohm	50	50	50
Max. power input, W	50	50	50

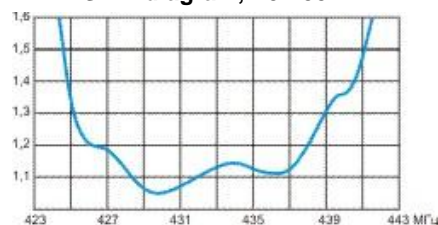
Mechanical specifications

Model	Y5-CDMA	Y5-433	Y5-446
Weight, kg		0.65	
Size, mm		640x330x20	
Construction material		Aluminium alloy	
Mast diametr, mm		25-55	
Rated wind velocity, m/s		45	
Load of side wind 45 m/s, H		10	
Rated wind velocity with 0.5" icing, m/s		28	
Temperature range, °C		from -50 to +50	
Connector		TNC-male	
		low loss cable 2.5 m	

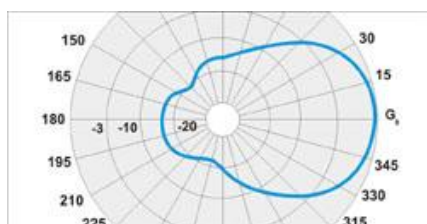
**VSWR diagram, Y5-CDMA**



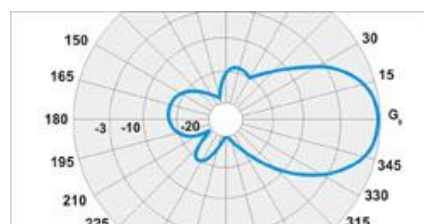
**VSWR diagram, Y5-433**



**"Y5" antennas H-plane pattern**



**"Y5" antennas E-plane pattern**





## 400-490 MHz Lokomotive antenna LA-UHF. Models LA-433, LA-446, LA- CDMA

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### Electrical specifications

Model	LA-UHF	LA-433	LA-446	LA-CDMA
Operating frequency band, MHz	400-490	428-438	440-452	453-467
VSWR, not more than	1.5	1.5	1.5	1.5
Gain OFFSET, dBi	2.15	2.15	2.15	2.15
Sector in vertical plane, -3dB	65°	65°	65°	65°
Impedance, Ohm	50	50	50	50
Max. power input, W	300	300	300	300

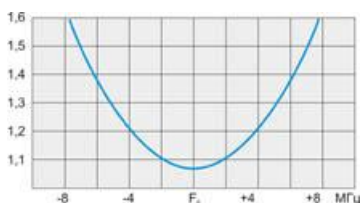
### Mechanical specifications

Model	LA-UHF	LA-433	LA-446	LA-CDMA
Weight, kg			not more 1	
Height/Length, mm			80	
Construction material			Aluminium alloy	
Radome			ABS	
Standard mounting			horizontal metal plane	
Rated wind velocity, m/s			55	
Wind loading area, m <sup>2</sup>			0,008	
Rated wind velocity with 0.5" icing, m/s			42	
Temperature range, °C			from -50 to +50	
Connector			N-female	

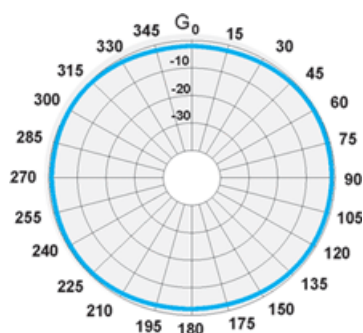
Locomotive antennas a new series of models "LA" are purposed to be exploited in the railroad communications systems within the range 405-470 MHz. The equipment of TETRA standard that works in this range as well as the data transfer system may include these mobile antennas.

The "LA" models have low-profile construction, their height does not exceed 80 mm and they are protected by a strong case made of ABS-plastic. This ensures the improved aerodynamic characteristics and additional electrical safety of this antenna. The construction is grounded by direct current.

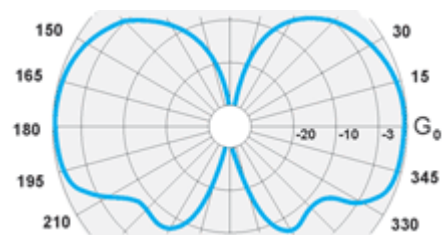
#### VSWR diagram, "LA" antennas



#### "LA" H-plane pattern



#### "LA" E-plane pattern





## 453-467 MHz Subscribers' antenna SS-1CDMA

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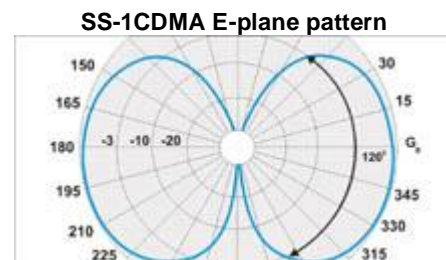
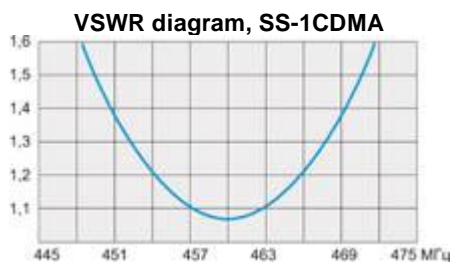


### Electrical specifications

Model	SS-1CDMA
Operating frequency band, MHz	453-467
Gain, dBi	0
VSWR, not more than	1.5
Polarization	vertical
Max. power input, W	50
H-plane beamwidth	360°
E-plane beamwidth	120°
Impedance, Ohm	50

### Mechanical specifications

Model	SS-1CDMA
Dimensions (LxWxH), mm	240x240x130
Weight, kg	0.5
Rated wind velocity, m/s	no data
Radiator	copper
Radome	Polystyrene white
Mounting	On a ceiling
Connector	N-female





## Subscriber's antennas SU-3CDMA, SU-3CDMA-G 430-470 MHz

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SU-3CDMA



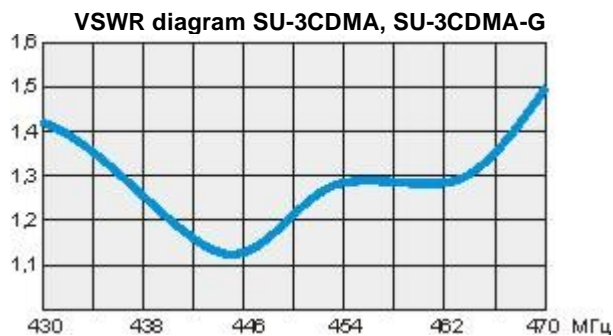
SU-3CDMA-G

### Electrical specifications

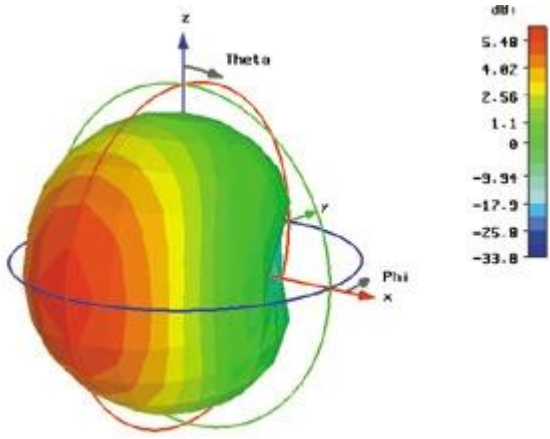
Model	SU-3CDMA	SU-3CDMA-G
Operating frequency band, MHz	430-470	430-470
VSWR, not more than	2	2
Gain, dBi	3	3
Sector in E-plane, -3dB	120 <sup>0</sup>	120°
Sector in H-plane, -3dB	180°	180°
Impedance, Ohm	50	50
Max. power input, W	200	200
Polarization	horizontal	vertical

### Mechanical specifications

Model	SU-3CDMA	SU-3CDMA-G
Weight not more than , kg	1.12	1.12
Radiating unit construction material		brass
Radome material		PVC
Radome color		white
Standard mounting		on a wall
Temperature range, °C		from -50 to +50
Connector		TNC-female
Size, sm		350x210x65



3D-diagram



SU-3CDMA H-plane pattern

