



Subscribers antennas for WIMAX

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| Model | Short description | Band, MHz | Gain, dBi |
|--------|------------------------------------|-----------|-----------|
| A-8X | Collinear, OMNI, fiberglass, white | 3400-3600 | 8 |
| A-11X | Collinear, OMNI, fiberglass, white | 3400-3600 | 11 |
| SU-12X | Subscriber antenna, ABS-grey | 3400-3600 | 12 |
| SU-15X | Subscriber antenna, ABS-grey | 3400-3600 | 15 |
| SU-18X | Subscriber antenna, ABS-grey | 3400-3600 | 18 |
| A-8Y | Collinear, OMNI, fiberglass, white | 5150-5350 | 8 |
| A-11Y | Collinear, OMNI, fiberglass, white | 5150-5350 | 11 |
| A-8Z | Collinear, OMNI, fiberglass, white | 5750-5850 | 8 |
| A-11Z | Collinear, OMNI, fiberglass, white | 5750-5850 | 11 |
| SU-12Y | Subscriber antenna, ABS-grey | 5150-5350 | 12 |
| SU-15Y | Subscriber antenna, ABS-grey | 5150-5350 | 15 |
| SU-18Y | Subscriber antenna, ABS-grey | 5150-5350 | 18 |
| SU-12Z | Subscriber antenna, ABS-grey | 5750-5850 | 12 |
| SU-15Z | Subscriber antenna, ABS-grey | 5750-5850 | 15 |
| SU-18Z | Subscriber antenna, ABS-grey | 5750-5850 | 18 |



3400-3600 MHz Collinear antennas A-8X, A-11X

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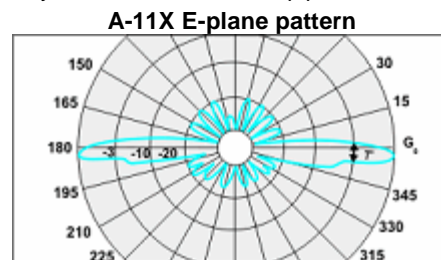
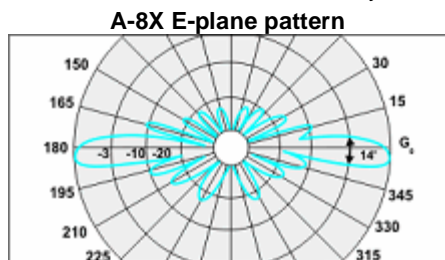
Electrical specifications

| Model | A-8X | A-11X |
|-------------------------------|-----------|-----------|
| Operating frequency band, MHz | 3400-3600 | 3400-3600 |
| Gain, dBi | 8 | 11 |
| VSWR, not more than | 1.5 | 1.5 |
| Polarization | | vertical |
| Electrical downtilt (3.4 GHz) | 3° | 7° |
| Max. power input, W | 10 | 10 |
| Sector in H-plane (-3 dB) | 360° | 360° |
| Sector in E-plane (-3 dB) | 14° | 7° |
| Impedance, Ohm | 50 | 50 |

Mechanical specifications

| Model | A-8X | A-11X |
|--------------------------|-----------|---------------------------------|
| Dimensions (LxWxH), mm | 35x35x490 | 35x35x990 |
| Weight, kg | 0.15 | 0.31 |
| Rated wind velocity, m/s | 50 | 50 |
| Radiator | PCB | PCB |
| Radome | grey PVC | grey PVC |
| Mounting kit CPK-70 | | On a mast (35-70 mm) or on wall |
| Connector | | N-female (TNC optional) |

For the work within the frequency range 3,4-3,6 GHz we suggest to use our new collinear vertical antennas A-8X and A-11X. These antennas possess an increased gain (8 and 11 dBi), an ideally circular radiation pattern, small electrical tilt of the beam in a vertical plane. These antennas are mounted by means of the wall bracket and by a worm buckle at the pipe-mast.





3400-3600 MHz Subscribers' antennas SU-12X, SU-15X, SU-18X

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SU-12X



SU-15X



SU-18X



Electrical specifications

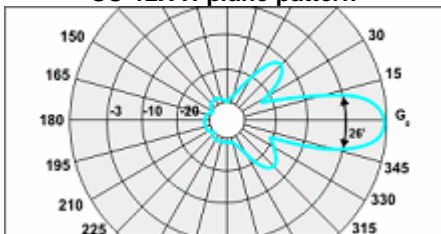
| Model | SU-12X | SU-15X | SU-18X |
|-------------------------------|-----------|-----------|-----------|
| Operating frequency band, MHz | 3400-3600 | 3400-3600 | 3400-3600 |
| Gain, dBi | 12 | 15 | 18 |
| VSWR, not more than | 1.5 | 1.5 | 1.5 |
| Front-to-back ratio, dB | 26 | 27 | 28 |
| Polarization | vertical | vertical | vertical |
| Max. power input, W | 10 | 10 | 10 |
| Sector in H-plane (-3 dB) | 26° | 12° | 6° |
| Sector in E-plane (-3 dB) | 70° | 70° | 70° |
| Impedance, Ohm | 50 | 50 | 50 |

Mechanical specifications

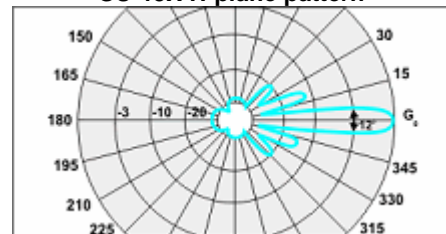
| Model | SU-12X | SU-15X | SU-18X |
|--------------------------|--|------------|------------|
| Dimensions (LxWxH), mm | 300x65x195 | 520x60x200 | 740x60x200 |
| Weight, kg | 0.54 | 1.1 | 1.5 |
| Rated wind velocity, m/s | 55 | 55 | 43 |
| Radiator | PCB | PCB | PCB |
| Radome | grey, ABS | grey, ABS | grey, ABS |
| Mounting | On a wall or on a mast with "Norma", CP-55D, CP-1150, CP-220 | | |
| Connector | N-female on a cable | | |

As subscribers' antennas for the frequency values 3.4-3.6 GHz we propose the models SU-12X with the gain of 12 dBi, SU-15X with the gain of 15 dBi, SU-18X with the gain of 18 dBi. The antennas are implemented similarly to the models for the DECT and WLAN ranges. They possess a convenient cable output, can be mounted both on a mast and on a flat surface and have an all-weather types performance. All the subscribers' antennas have a narrow radiation pattern in H-plane and rather a wide radiation pattern in E-plane (70° by the level -3 dB). The cable output is implemented on the high-quality cable of Huber-Suhner production and on a connector of Rosenberger production what ensures a stability of the characteristics.

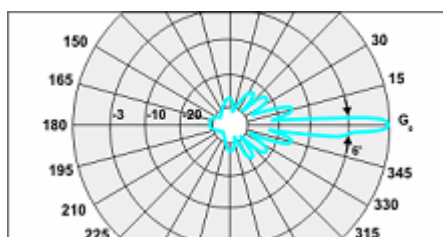
SU-12X H-plane pattern



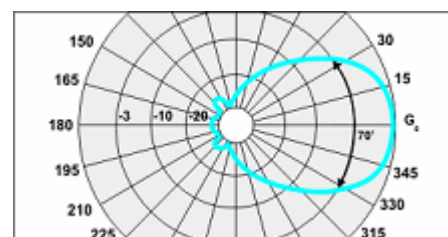
SU-15X H-plane pattern



SU-18X H-plane pattern



SU-12X, SU-15X, SU-18X E-plane pattern





5150-5350 MHz Collinear antennas A-8Y, A-11Y

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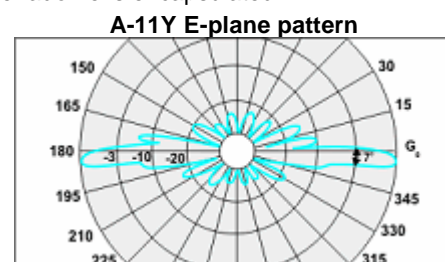
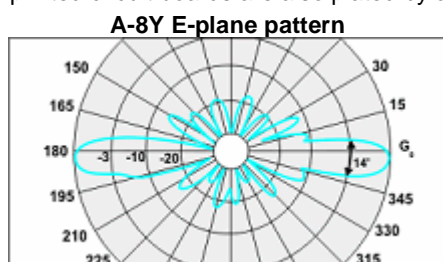
Electrical specifications

| Model | A-8Y | A-11Y |
|-------------------------------|-----------|-----------|
| Operating frequency band, MHz | 5150-5350 | 5150-5350 |
| Gain, dBi | 8 | 11 |
| VSWR, not more than | 1.5 | 1.5 |
| Polarization | | vertical |
| Electrical downtilt | 3° | 7° |
| Max. power input, W | 10 | 10 |
| Sector in H-plane (-3 dB) | 360° | 360° |
| Sector in E-plane (-3 dB) | 14° | 7° |
| Impedance, Ohm | 50 | 50 |

Mechanical specifications

| Model | A-8Y | A-11Y |
|--------------------------|-----------|-------------------------------|
| Dimensions (LxWxH), mm | 35x35x370 | 35x35x810 |
| Weight, kg | 0.1 | 0.25 |
| Rated wind velocity, m/s | 50 | 50 |
| Radiator | PCB | PCB |
| Radome | grey PVC | grey PVC |
| Mounting kit CPK-70 | | on a mast 35-70 mm or on wall |
| Connector | | N-female |

The vertical antennas A-8Y and A-11Y possess an increased gain (8 and 11 dBi), an ideally circular radiation pattern, small electrical tilt of the beam in a vertical plane. Their construction is formed by an antenna array with consequent feeding of the elements on the printed circuit board, implemented on the SHF material, which is characterized by a small value of the dielectric losses. The printed circuit boards are also plated by an SHF-lacquer, and the radome is encapsulated.





5750-5850 MHz Collinear antennas A-8Z, A-11Z

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A-8Z



A-11Z



Electrical specifications

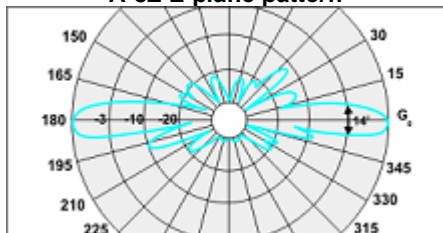
| Model | A-8Z | A-11Z |
|--------------------------------|-----------|-----------|
| Operating frequency band, MHz | 5750-5850 | 5750-5850 |
| Gain, dBi | 8 | 11 |
| VSWR, not more than | 1.5 | 1.5 |
| Polarization | | vertical |
| Electrical downtilt (5.75 GHz) | 1° | 2° |
| Max. power input, W | 10 | 10 |
| Sector in H-plane (-3 dB) | 360° | 360° |
| Sector in E-plane (-3 dB) | 14° | 7° |
| Impedance, Ohm | 50 | 50 |

Mechanical specifications

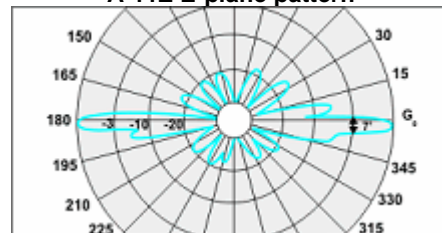
| Model | A-8Z | A-11Z |
|--------------------------|-----------|---------------------------------|
| Dimensions (LxWxH), mm | 35x35x370 | 35x35x810 |
| Weight, kg | 0.1 | 0.25 |
| Rated wind velocity, m/s | 50 | 50 |
| Radiator | PCB | PCB |
| Radome | grey PVC | grey PVC |
| Mounting kit CPK-70 | | On a mast (35-70 mm) or on wall |
| Connector | | N-female |

The vertical antennas A-8Z and A-11Z possess an increased gain (8 and 11 dBi), an ideally circular radiation pattern, small electrical tilt of the beam in a vertical plane. Their construction is formed by an antenna array with consequent feeding of the elements on the printed circuit board, implemented on the SHF material, which is characterized by a small value of the dielectric losses. The printed circuit boards are also plated by an SHF-lacquer, and the radome is encapsulated. The antennas are characterized by small sizes and reliable implementation.

A-8Z E-plane pattern



A-11Z E-plane pattern





5150-5350 MHz Subscribers' antennas SU-12Y, SU-15Y, SU-18Y

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SU-12Y



SU-15Y



SU-18Y



Electrical specifications

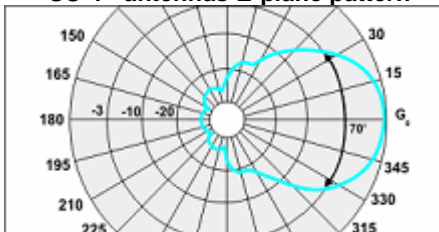
| Model | SU-12Y | SU-15Y | SU-18Y |
|-------------------------------|-----------|-----------|-----------|
| Operating frequency band, MHz | 5150-5350 | 5150-5350 | 5150-5350 |
| Gain, dBi | 12 | 15 | 18 |
| VSWR, not more than | 1.5 | 1.5 | 1.5 |
| Front-to-back ratio, dB | 35 | 39 | 30 |
| Polarization | vertical | vertical | vertical |
| Max. power input, W | 10 | 10 | 10 |
| Sector in H-plane (-3 dB) | 26° | 12° | 6° |
| Sector in E-plane (-3 dB) | 70° | 70° | 70° |
| Impedance, Ohm | 50 | 50 | 50 |

Mechanical specifications

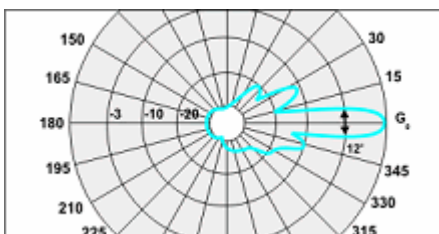
| Model | SU-12Y | SU-15Y | SU-18Y |
|--------------------------|--|------------|------------|
| Dimensions (LxWxH), mm | 130x50x100 | 300x65x195 | 520x60x200 |
| Weight, kg | 0.2 | 0.54 | 1.1 |
| Rated wind velocity, m/s | 55 | 55 | 43 |
| Radiator | PCB | PCB | PCB |
| Radome | grey, ABS | grey, ABS | grey, ABS |
| Mounting | On a wall or on a mast with "Norma", CP-55D, CP-1150, CP-220 | | |
| Connector | N-female on a cable | | |

A new set of the subscribers' antennas for 5,15-5,35 GHz includes the models SU-12Y with the gain of 12 dBi, SU-15Y with the gain of 15 dBi, SU-18Y with the gain of 18 dBi. They have a convenient cable output, are mounted both on the mast and on the flat surface and possess an all-weather types performance. By their construction the active elements compose a printed circuit board, which is plated by a special SHF - lacquer in order to ensure the antennas' characteristics not to be changed during the whole exploitation period. The radome is encapsulated and, as well as in all antennas, a drainage is provided to escape the condensate formation. The cable output is implemented on the high-quality cable of Huber-Suhner production and on a connector of Rosenberger production what ensures a stability of the characteristics.

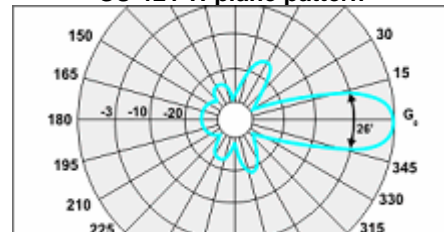
"SU-Y" antennas E-plane pattern



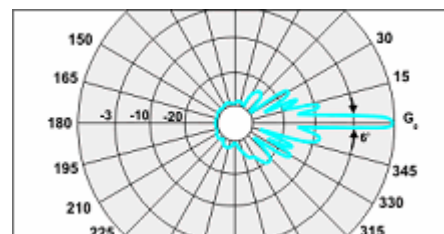
SU-15Y H-plane pattern



SU-12Y H-plane pattern



SU-18Y H-plane pattern





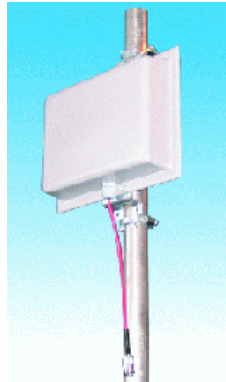
5750-5850 MHz Subscribers' antennas SU-12Z, SU-15Z, SU-18Z

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SU-12Z



SU-15Z



SU-18Z



Electrical specifications

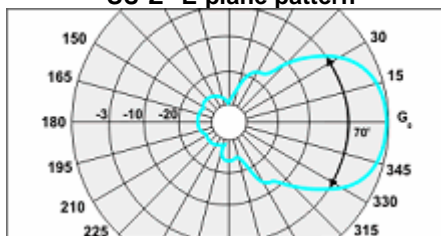
| Model | SU-12Z | SU-15Z | SU-18Z |
|-------------------------------|-----------|-----------|-----------|
| Operating frequency band, MHz | 5750-5850 | 5750-5850 | 5750-5850 |
| Gain, dBi | 12 | 15 | 18 |
| VSWR, not more than | 1.5 | 1.5 | 1.5 |
| Front-to-back ratio, dB | 35 | 39 | 30 |
| Polarization | vertical | vertical | vertical |
| Max. power input, W | 10 | 10 | 10 |
| Sector in H-plane (-3 dB) | 26° | 12° | 6° |
| Sector in E-plane (-3 dB) | 70° | 70° | 70° |
| Impedance, Ohm | 50 | 50 | 50 |

Mechanical specifications

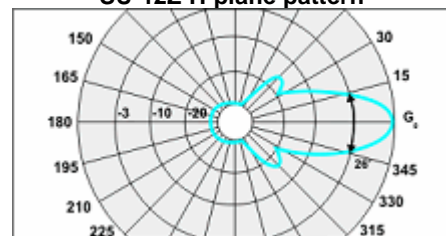
| Model | SU-12Z | SU-15Z | SU-18Z |
|--------------------------|--|------------|------------|
| Dimensions (LxWxH), mm | 130x50x100 | 300x65x195 | 520x60x200 |
| Weight, kg | 0.54 | 1.1 | 1.5 |
| Rated wind velocity, m/s | 55 | 55 | 43 |
| Radiator | PCB | PCB | PCB |
| Radome | grey, ABS | grey, ABS | grey, ABS |
| Mounting | On a wall or on a mast with "Norma", CP-55D, CP-1150, CP-220 | | |
| Connector | N-female on a cable | | |

As for the portion of the frequency range of 5,75-5,85 GHz, it is presented by our new subscribers' antennas of the series named "SU". The models SU-12Z (12 dBi), SU-15Z (15 dBi), SU-18Z (18 dBi) possess all the advantages of the high-efficient antennas of the point-to-point type: a high gain value, the temporal and the climatic stability of the characteristics, a convenience of the mounting (on the wall or on the pipe-mast) and a convenience of the capsulation (a cable output). The cable output is implemented on the high-quality cable of Huber-Suhner production and on connector of Rosenberger production what ensures a stability of the characteristics.

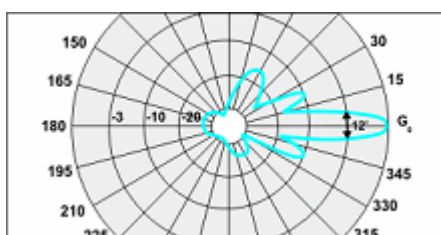
"SU-Z" E-plane pattern



SU-12Z H-plane pattern



SU-15Z H-plane pattern



SU-18Z H-plane pattern

