

# **SPECIFICATION FOR MT – 485045/N SUBSCRIBER ANTENNA 5.15-6.0 GHz, 22 dBi**

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|                               |                            |                     |
|-------------------------------|----------------------------|---------------------|
| <b>MTI WIRELESS EDGE LTD.</b> | <b>MT – 485045/N</b>       | <b>REV</b>          |
| <b>SCALE: NONE</b>            | <b>DOC NO. RD42162900C</b> | <b>SHEET 1 OF 5</b> |

| REVISION RECORD |     |             |      |      |
|-----------------|-----|-------------|------|------|
| REV             | ECO | DESCRIPTION | APVD | DATE |
|                 |     |             |      |      |
|                 |     |             |      |      |
|                 |     |             |      |      |
|                 |     |             |      |      |
|                 |     |             |      |      |
|                 |     |             |      |      |

|       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| SHEET | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
| REV   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SHEET | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 |
| REV   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SHEET | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| REV   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| SHEET | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 |
| REV   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

|                                   |   |  |  |
|-----------------------------------|---|--|--|
| <b>PRODUCT STATUS:</b>            |   |  |  |
| <input type="checkbox"/> PROPOSAL | <input type="checkbox"/> IN DEVELOPMENT | <input type="checkbox"/> PREPRODUCTION | <input checked="" type="checkbox"/> PRODUCTION |

| CONTRACT NO |                |      |         |
|-------------|----------------|------|---------|
| ACTION      | NAME           | SIGN | DATE    |
| PREP        | Yael HARASH    | Yael | 17.4.07 |
| CHKD        | DOV FEINER     |      |         |
| CHKD        |                |      |         |
| CHKD        |                |      |         |
| DSGN        | MICHAEL HAIKIN |      |         |
| PROJ        | MOTI ROSTMY    |      |         |
| MFG         |                |      |         |
| QA          | MOTI MOTOVICH  |      |         |
| MARK.       | EFI AGMON      |      |         |

|                        |   |     |              |
|------------------------|---|-----|--------------|
| MTI WIRELESS EDGE LTD. | SPECIFICATION FOR MT – 485045/N<br>SUBSCRIBER ANTENNA |     |              |
| DOC NO. RD42162900C    | 5.15-6.0 GHz, 22 dBi                                  |     |              |
| SCALE: NONE            | CLASSIFICATION: NONE                                  | REV | SHEET 2 OF 5 |

## SPECIFICATION

### FLAT PANEL SUBSCRIBER ANTENNA

|                                   |   |          |  |
|-----------------------------------|---|----------|--|
| <b>MTI PART NUMBER</b>            | <b>MT – 485045/N</b>  |          |  |
| REGULATORY COMPLIANCE             | ETSI EN 302 085 V1.1.2 (2001-02) Range 1<br>RoHS , CE 0682  |          |  |
| <b><u>1. ELECTRICAL</u></b>       |   |          |  |
| FREQUENCY RANGE                   | 5.15 – 6.0 GHz  |          |  |
| GAIN                              | 21.5 dBi (min) @ 5.15 –5.25 GHz<br>22 dBi (min) @ 5.25 – 5.875 GHz<br>21.5 dBi (min) @ 5.875 –6.0 GHz |          |  |
| VSWR                              | 1.9:1 @ 5.15 – 5.25 GHz<br>1.7:1 @ 5.25 – 5.875 GHz<br>2:1 @ 5.875 – 6.0 GHz                          |          |  |
| 3 dB BEAMWIDTH                    | AZIMUTH   | 9° (typ) |  |
|                                   | ELEVATION   | 9° (typ) |  |
| POLARIZATION                      | Linear (Vertical or Horizontal)   |          |  |
| SIDELOBES LEVEL                   | ETSI EN 302 085 V1.1.2 (2001-02) TS1-TS3  |          |  |
| CROSS POLARIZATION DISCRIMINATION | -28 dB (max)  |          |  |
| CROSS POLARIZATION                | ETSI EN 302 085 V1.1.2 (2001-02) TS1-TS3  |          |  |
| F/B RATIO                         | -35 dB (max)  |          |  |
| INPUT IMPEDANCE                   | 50 (ohm)  |          |  |
| INPUT POWER                       | 6W (max)  |          |  |
| LIGHTNING PROTECTION              | DC Grounded   |          |  |
| <b><u>2. MECHANICAL</u></b>       |   |          |  |
| DIMENSIONS (LxWxD)                | 305 x 305 x 15 mm (max)   |          |  |
| WEIGHT                            | 1.2 (kgs) (max)   |          |  |
| CONNECTOR                         | N-Type Female   |          |  |
| RADOME                            | Plastic   |          |  |
| BASE PLATE                        | Aluminum with chemical conversion coating   |          |  |
| OUTLINE DRAWING                   | RD42163000C   |          |  |
| <b><u>3. MOUNTING KIT</u></b>     |   |          |  |
| See RD41191800C , MT-120018       |   |          |  |

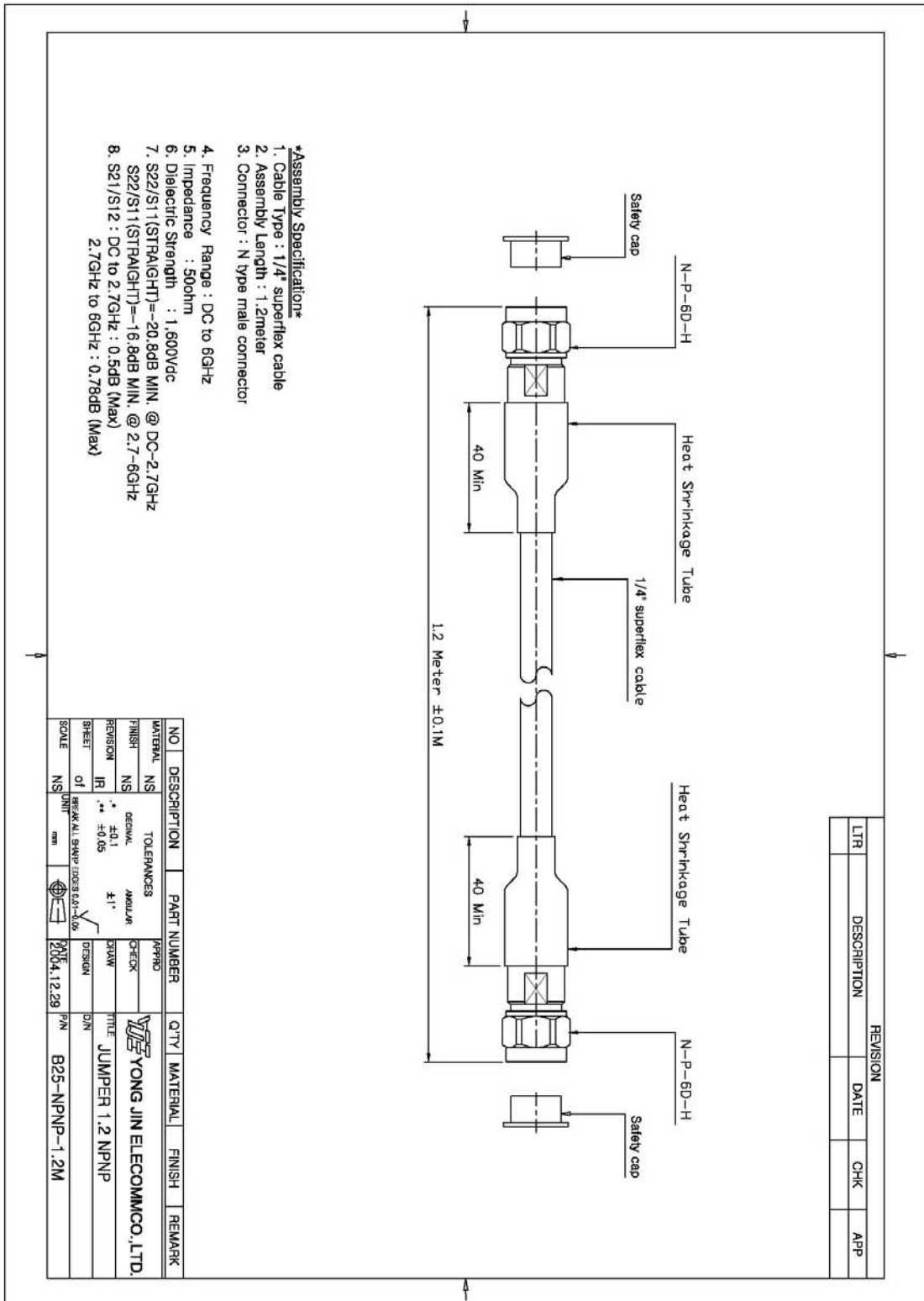
|                               |                             |   |                     |
|-------------------------------|-----------------------------|---|---------------------|
| <b>MTI WIRELESS EDGE LTD.</b> |                             | <b>SPECIFICATION FOR MT – 485045/N<br/>SUBSCRIBER ANTENNA</b> |                     |
| <b>DOC NO. RD42162900C</b>    |                             | <b>5.15-6.0 GHz, 22 dBi</b>                                   |                     |
| <b>SCALE: NONE</b>            | <b>CLASSIFICATION: NONE</b> | <b>REV</b>  | <b>SHEET 3 OF 5</b> |

| <b>4. ENVIRONMENTAL</b>                              |                      |                 |                   |                      |
|--|----------------------|-----------------|-------------------|----------------------|
| <b>TEST</b>  | <b>STANDARD</b>      | <b>DURATION</b> | <b>TEMPERTURE</b> | <b>NOTES</b>         |
| LOW TEMPERATURE                                      | IEC 68-2-1           | 72 h            | -55°C             | -                    |
| HIGH TEMPERATURE                                     | IEC 68-2-2           | 72 h            | +71°C             | -                    |
| TEMP. CYCLING  | IEC 68-2-14          | 1 h             | -45°C +70°C       | 3 Cycles             |
| VIBRATION  | IEC 60721-3-4        | 30 min/axis     | -                 | Random 4M5           |
| SHOCK MECHANICAL                                     | IEC 60721-3-4        | -               | -                 | 4M5                  |
| HUMIDITY   | ETSI EN300-2-4 T4.1E | 144 h           | -                 | 95%                  |
| WATER TIGHTNESS                                      | IEC 529              | -               | -                 | IP67                 |
| SOLAR RADIATION                                      | ASTM G53             | 1000 h          | -                 | -                    |
| SALT SPRAY   | IEC 68-2-11 Ka       | 500 h           | -                 | -                    |
| ICE AND SNOW   | -                    | -               | -                 | 25mm Radial          |
| WIND SPEED SURVIVAL OPERATION                        | -                    | -               | -                 | 220 Km/h<br>160 Km/h |
| WIND LOAD (SURVIVAL):<br>FRONT THRUST<br>SIDE THRUST | -                    | -               | -                 | 26.8 kg<br>1.3 kg    |

This kit includes the following:

- 1) Antenna 5.15-6.0GHz 22DBi (As defined above).
- 2) Mounting Kit MT-120018
- 3) Out door cable, l=1.2M.

|                               |                             |   |                     |  |
|-------------------------------|-----------------------------|---|---------------------|--|
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| <b>DOC NO. RD42162900C</b>    |                             | <b>5.15-6.0 GHz, 22 dBi</b>                                   |                     |  |
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- \*Assembly Specifications\***
1. Cable Type : 1/4" superflex cable
  2. Assembly Length : 1.2meter
  3. Connector : N type male connector

4. Frequency Range : DC to 6GHz
5. Impedance : 50ohm
6. Dielectric Strength : 1,600Vdc
7. S22/S11(STRAIGHT)=-20.8dB MIN. @ DC-2.7GHz  
S22/S11(STRAIGHT)=-16.8dB MIN. @ 2.7-6GHz
8. S21/S12 : DC to 2.7GHz : 0.5dB (Max)  
2.7GHz to 6GHz : 0.78dB (Max)

|     |             | REVISION |     |     |
|-----|-------------|----------|-----|-----|
| LTR | DESCRIPTION | DATE     | CHK | APP |
|     |             |          |     |     |

| NO | DESCRIPTION | PART NUMBER | QTY | MATERIAL | FINISH | REMARK |
|----|-------------|-------------|-----|----------|--------|--------|
|    |             |             |     |          |        |        |

| MATERIAL | NS | TOLEFRANCES | AMBLUR | YONG JIN ELECOMMCO.,LTD. |
|----------|----|-------------|--------|--------------------------|
|          |    |             |        |                          |

| THICK | NS | DEVAL | ±0.1 | CHECK | YONG JIN ELECOMMCO.,LTD. |
|-------|----|-------|------|-------|--------------------------|
|       |    |       |      |       |                          |

| REVISION | IR | ±0.05 | 4.1" | DRAW | TITLE           |
|----------|----|-------|------|------|-----------------|
|          |    |       |      |      | JUMPER 1.2 NPNP |

| SHEET | OF | REF:K ALL SWAP J02'S 0.21-0.05 | DESIGN | D/N |
|-------|----|--------------------------------|--------|-----|
|       |    |                                |        |     |

| SCALE | NS | UNIT | mm | DATE       | P/N           |
|-------|----|------|----|------------|---------------|
|       |    |      |    | 2004.12.28 | 825-NPNP-1.2M |

|                        |                      |   |              |  |
|------------------------|----------------------|---|--------------|--|
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| DOC NO. RD42162900C    |                      | 5.15-6.0 GHz, 22 dBi                                  |              |  |
| SCALE: NONE            | CLASSIFICATION: NONE | REV   | SHEET 5 OF 5 |  |