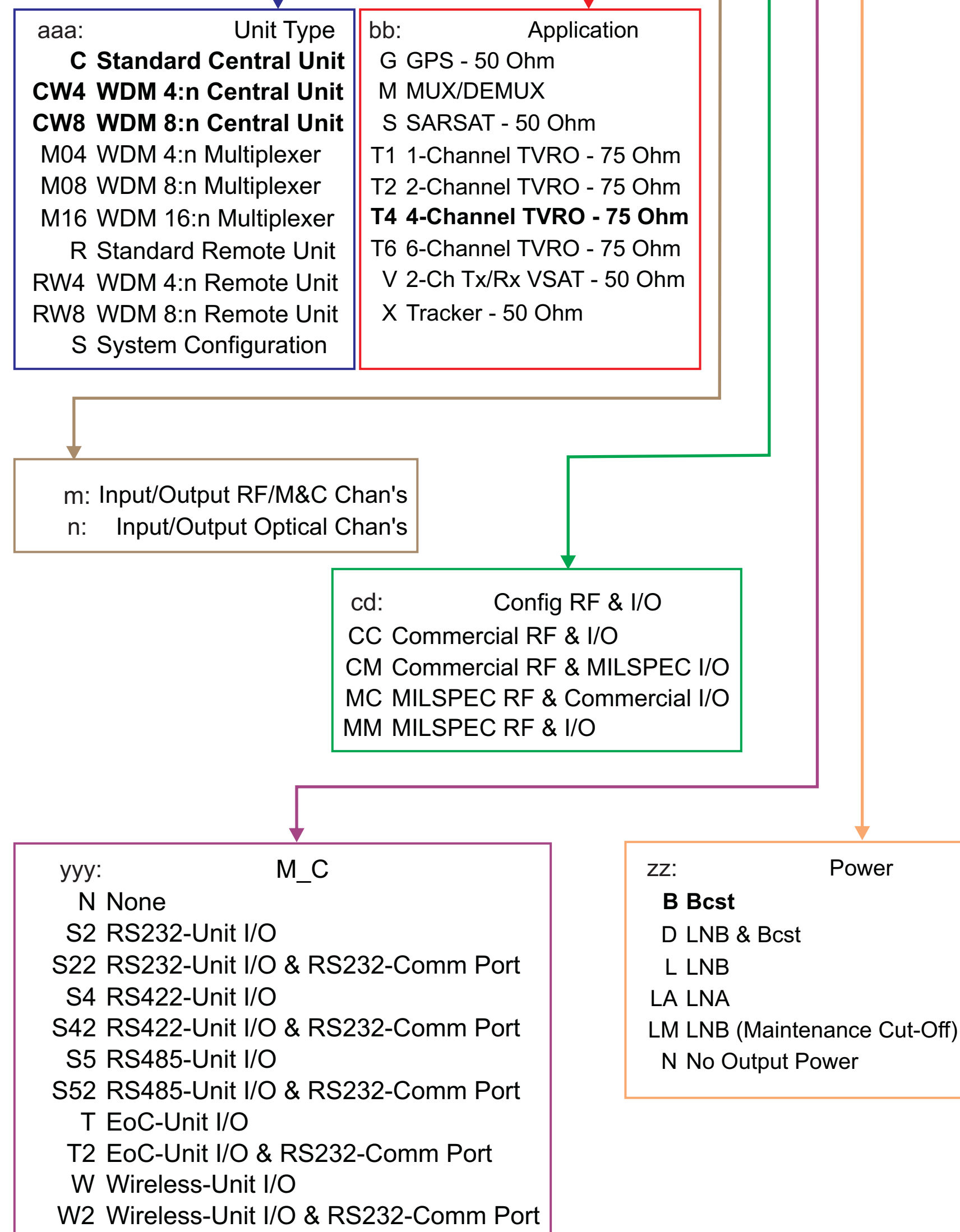


| LTR | DESCRIPTION     | DATE       | APPROVAL |
|-----|-----------------|------------|----------|
| -   | Initial Release | 01-05-2018 | KCLEIGH  |
|     |                 |            |          |
|     |                 |            |          |
|     |                 |            |          |
|     |                 |            |          |
|     |                 |            |          |

KL*CaaT4-m2ncd-yyyBz*



NOTES:

1. KLaaabb-*m2ncM*-yyyzz corresponds to laser modifications for military spec connectors.
2. KLaaabb-*m2nC*-yyyzz corresponds to laser modifications for commercial grade connectors.
3. KLaaabb-*m2ncd*-S4zz corresponds to a Central Unit configured with a single serial M&C port.
4. KLaaabb-*m2ncd*-S42zz corresponds to a Central Unit configured with dual serial M&C ports.
5. This document provides information pertaining only to the 4-channel TVRO Central Unit variations. *KLfiber* additionally provides 128 unique 6-channel TVRO unit variations when special ordered.
6. There are 136 different 4-Channel configurations of the *KLfiber* Central Unit as listed on sheets 2 & 3.

[illegible]



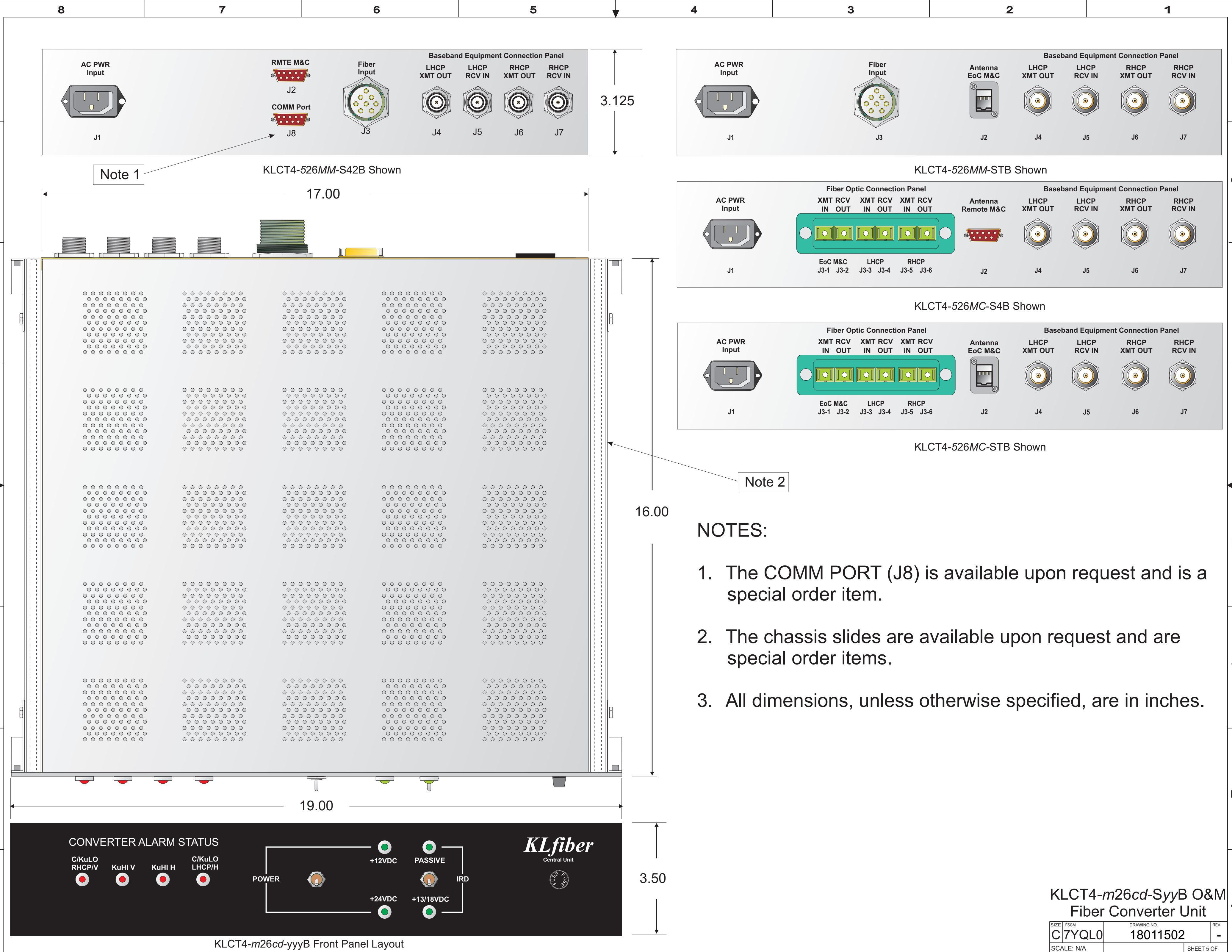


|   |                                                                                                                                                                                                                                                                                                                                                        |                   |         |          |                                               |                             |                   |      |   |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------|----------|-----------------------------------------------|-----------------------------|-------------------|------|---|
|   | 8                                                                                                                                                                                                                                                                                                                                                      | 7                 | 6       | 5        | 4                                             | 3                           | 2                 | 1    |   |
| H |                                                                                                                                                                                                                                                                                                                                                        |                   |         |          |                                               |                             |                   |      | H |
|   | Central Converter Unit Configurations                                                                                                                                                                                                                                                                                                                  |                   |         |          |                                               |                             |                   |      |   |
|   | Model Number                                                                                                                                                                                                                                                                                                                                           | RF/M&C            | OPTICAL | Function | Configuration                                 | M&C                         | Output Power      |      |   |
|   | 49                                                                                                                                                                                                                                                                                                                                                     | KLCW4T4-421CC-NB  | 4 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 4:n Central Unit | Commercial RF & I/O         | None              | Bcst |   |
|   | 50                                                                                                                                                                                                                                                                                                                                                     | KLCW4T4-421CM-NB  | 4 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 4:n Central Unit | Commercial RF & MILSPEC I/O | None              | Bcst |   |
|   | 51                                                                                                                                                                                                                                                                                                                                                     | KLCW4T4-421MC-NB  | 4 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 4:n Central Unit | MILSPEC RF & Commercial I/O | None              | Bcst |   |
| G | 52                                                                                                                                                                                                                                                                                                                                                     | KLCW4T4-421MM-NB  | 4 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 4:n Central Unit | MILSPEC RF & I/O            | None              | Bcst | G |
|   | 53                                                                                                                                                                                                                                                                                                                                                     | KLCW4T4-422CC-NB  | 4 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 4:n Central Unit | Commercial RF & I/O         | None              | Bcst |   |
|   | 54                                                                                                                                                                                                                                                                                                                                                     | KLCW4T4-422CM-NB  | 4 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 4:n Central Unit | Commercial RF & MILSPEC I/O | None              | Bcst |   |
|   | 55                                                                                                                                                                                                                                                                                                                                                     | KLCW4T4-422MC-NB  | 4 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 4:n Central Unit | MILSPEC RF & Commercial I/O | None              | Bcst |   |
|   | 56                                                                                                                                                                                                                                                                                                                                                     | KLCW4T4-422MM-NB  | 4 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 4:n Central Unit | MILSPEC RF & I/O            | None              | Bcst |   |
|   | 57                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521CC-S2B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & I/O         | RS232-Unit I/O    | Bcst |   |
|   | 58                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521CC-S4B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & I/O         | RS422-Unit I/O    | Bcst |   |
|   | 59                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521CC-S5B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & I/O         | RS485-Unit I/O    | Bcst |   |
| F | 60                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521CC-TB  | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & I/O         | EoC-Unit I/O      | Bcst | F |
|   | 61                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521CC-WB  | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & I/O         | Wireless-Unit I/O | Bcst |   |
|   | 62                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521CM-S2B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & MILSPEC I/O | RS232-Unit I/O    | Bcst |   |
|   | 63                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521CM-S4B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & MILSPEC I/O | RS422-Unit I/O    | Bcst |   |
|   | 64                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521CM-S5B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & MILSPEC I/O | RS485-Unit I/O    | Bcst |   |
|   | 65                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521CM-TB  | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & MILSPEC I/O | EoC-Unit I/O      | Bcst |   |
|   | 66                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521CM-WB  | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & MILSPEC I/O | Wireless-Unit I/O | Bcst |   |
| E | 67                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521MC-S2B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & Commercial I/O | RS232-Unit I/O    | Bcst | E |
|   | 68                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521MC-S4B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & Commercial I/O | RS422-Unit I/O    | Bcst |   |
|   | 69                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521MC-S5B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & Commercial I/O | RS485-Unit I/O    | Bcst |   |
|   | 70                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521MC-TB  | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & Commercial I/O | EoC-Unit I/O      | Bcst |   |
|   | 71                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521MC-WB  | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & Commercial I/O | Wireless-Unit I/O | Bcst |   |
|   | 72                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521MM-S2B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & I/O            | RS232-Unit I/O    | Bcst |   |
|   | 73                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521MM-S4B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & I/O            | RS422-Unit I/O    | Bcst |   |
| D | 74                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521MM-S5B | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & I/O            | RS485-Unit I/O    | Bcst | D |
|   | 75                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521MM-TB  | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & I/O            | EoC-Unit I/O      | Bcst |   |
|   | 76                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-521MM-WB  | 5 Chans | 1 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & I/O            | Wireless-Unit I/O | Bcst |   |
|   | 77                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522CC-S2B | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & I/O         | RS232-Unit I/O    | Bcst |   |
|   | 78                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522CC-S4B | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & I/O         | RS422-Unit I/O    | Bcst |   |
|   | 79                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522CC-S5B | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & I/O         | RS485-Unit I/O    | Bcst |   |
|   | 80                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522CC-TB  | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & I/O         | EoC-Unit I/O      | Bcst |   |
| C | 81                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522CC-WB  | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & I/O         | Wireless-Unit I/O | Bcst | C |
|   | 82                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522CM-S2B | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & MILSPEC I/O | RS232-Unit I/O    | Bcst |   |
|   | 83                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522CM-S4B | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & MILSPEC I/O | RS422-Unit I/O    | Bcst |   |
|   | 84                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522CM-S5B | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & MILSPEC I/O | RS485-Unit I/O    | Bcst |   |
|   | 85                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522CM-TB  | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & MILSPEC I/O | EoC-Unit I/O      | Bcst |   |
|   | 86                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522CM-WB  | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | Commercial RF & MILSPEC I/O | Wireless-Unit I/O | Bcst |   |
| B | 87                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522MC-S2B | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & Commercial I/O | RS232-Unit I/O    | Bcst | B |
|   | 88                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522MC-S4B | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & Commercial I/O | RS422-Unit I/O    | Bcst |   |
|   | 89                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522MC-S5B | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & Commercial I/O | RS485-Unit I/O    | Bcst |   |
|   | 90                                                                                                                                                                                                                                                                                                                                                     | KLCW8T4-522MC-TB  | 5 Chans | 2 Chans  | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit | MILSPEC RF & Commercial I/O | EoC-Unit I/O      | Bcst |   |
| A | <div> <div>KLCaaT4-m2ncd-yyzz</div> <div>Central Unit Configurations</div> <div>Multiplexed Units (Sheet 1 of 2)</div> </div> <div> <div> <div>SIZE</div> <div>FSCM</div> <div>C7YQL0</div> <div>SCALE: N/A</div> </div> <div> <div>DRAWING NO.</div> <div>18011502</div> </div> <div> <div>REV</div> <div>-</div> <div>SHEET 3 OF</div> </div> </div> |                   |         |          |                                               |                             |                   |      | A |
|   | 8                                                                                                                                                                                                                                                                                                                                                      | 7                 | 6       | 5        | 4                                             | 3                           | 2                 | 1    |   |



|     |  |                                                                                        |  |            |             |                                               |     |                             |  |                                     |  |              |  |   |  |
|-----|--|----------------------------------------------------------------------------------------|--|------------|-------------|-----------------------------------------------|-----|-----------------------------|--|-------------------------------------|--|--------------|--|---|--|
| 8   |  | 7                                                                                      |  | 6          |             | 5                                             |     | 4                           |  | 3                                   |  | 2            |  | 1 |  |
| H   |  | G                                                                                      |  | F          |             | E                                             |     | D                           |  | C                                   |  | B            |  | A |  |
|     |  | Central Converter Unit Configurations                                                  |  |            |             |                                               |     |                             |  |                                     |  |              |  |   |  |
|     |  | Model Number                                                                           |  | RF/M&C     | OPTICAL     | Function                                      |     | Configuration               |  | M&C                                 |  | Output Power |  |   |  |
| 91  |  | KLCW8T4-522MC-WB                                                                       |  | 5 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | Wireless-Unit I/O                   |  | Bcst         |  |   |  |
| 92  |  | KLCW8T4-522MM-S2B                                                                      |  | 5 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | RS232-Unit I/O                      |  | Bcst         |  |   |  |
| 93  |  | KLCW8T4-522MM-S4B                                                                      |  | 5 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | RS422-Unit I/O                      |  | Bcst         |  |   |  |
| 94  |  | KLCW8T4-522MM-S5B                                                                      |  | 5 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | RS485-Unit I/O                      |  | Bcst         |  |   |  |
| 95  |  | KLCW8T4-522MM-TB                                                                       |  | 5 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | EoC-Unit I/O                        |  | Bcst         |  |   |  |
| 96  |  | KLCW8T4-522MM-WB                                                                       |  | 5 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | Wireless-Unit I/O                   |  | Bcst         |  |   |  |
| 97  |  | KLCW8T4-621CC-S22B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & I/O         |  | RS232-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 98  |  | KLCW8T4-621CC-S42B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & I/O         |  | RS422-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 99  |  | KLCW8T4-621CC-S52B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & I/O         |  | RS485-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 100 |  | KLCW8T4-621CC-T2B                                                                      |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & I/O         |  | EoC-Unit I/O & RS232-Comm Port      |  | Bcst         |  |   |  |
| 101 |  | KLCW8T4-621CC-W2B                                                                      |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & I/O         |  | Wireless-Unit I/O & RS232-Comm Port |  | Bcst         |  |   |  |
| 102 |  | KLCW8T4-621CM-S22B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & MILSPEC I/O |  | RS232-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 103 |  | KLCW8T4-621CM-S42B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & MILSPEC I/O |  | RS422-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 104 |  | KLCW8T4-621CM-S52B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & MILSPEC I/O |  | RS485-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 105 |  | KLCW8T4-621CM-T2B                                                                      |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & MILSPEC I/O |  | EoC-Unit I/O & RS232-Comm Port      |  | Bcst         |  |   |  |
| 106 |  | KLCW8T4-621CM-W2B                                                                      |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & MILSPEC I/O |  | Wireless-Unit I/O & RS232-Comm Port |  | Bcst         |  |   |  |
| 107 |  | KLCW8T4-621MC-S22B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | RS232-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 108 |  | KLCW8T4-621MC-S42B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | RS422-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 109 |  | KLCW8T4-621MC-S52B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | RS485-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 110 |  | KLCW8T4-621MC-T2B                                                                      |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | EoC-Unit I/O & RS232-Comm Port      |  | Bcst         |  |   |  |
| 111 |  | KLCW8T4-621MC-W2B                                                                      |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | Wireless-Unit I/O & RS232-Comm Port |  | Bcst         |  |   |  |
| 112 |  | KLCW8T4-621MM-S22B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | RS232-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 113 |  | KLCW8T4-621MM-S42B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | RS422-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 114 |  | KLCW8T4-621MM-S52B                                                                     |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | RS485-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 115 |  | KLCW8T4-621MM-T2B                                                                      |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | EoC-Unit I/O & RS232-Comm Port      |  | Bcst         |  |   |  |
| 116 |  | KLCW8T4-621MM-W2B                                                                      |  | 6 Chans    | 1 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | Wireless-Unit I/O & RS232-Comm Port |  | Bcst         |  |   |  |
| 117 |  | KLCW8T4-622CC-S22B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & I/O         |  | RS232-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 118 |  | KLCW8T4-622CC-S42B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & I/O         |  | RS422-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 119 |  | KLCW8T4-622CC-S52B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & I/O         |  | RS485-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 120 |  | KLCW8T4-622CC-T2B                                                                      |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & I/O         |  | EoC-Unit I/O & RS232-Comm Port      |  | Bcst         |  |   |  |
| 121 |  | KLCW8T4-622CC-W2B                                                                      |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & I/O         |  | Wireless-Unit I/O & RS232-Comm Port |  | Bcst         |  |   |  |
| 122 |  | KLCW8T4-622CM-S22B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & MILSPEC I/O |  | RS232-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 123 |  | KLCW8T4-622CM-S42B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & MILSPEC I/O |  | RS422-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 124 |  | KLCW8T4-622CM-S52B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & MILSPEC I/O |  | RS485-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 125 |  | KLCW8T4-622CM-T2B                                                                      |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & MILSPEC I/O |  | EoC-Unit I/O & RS232-Comm Port      |  | Bcst         |  |   |  |
| 126 |  | KLCW8T4-622CM-W2B                                                                      |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | Commercial RF & MILSPEC I/O |  | Wireless-Unit I/O & RS232-Comm Port |  | Bcst         |  |   |  |
| 127 |  | KLCW8T4-622MC-S22B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | RS232-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 128 |  | KLCW8T4-622MC-S42B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | RS422-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 129 |  | KLCW8T4-622MC-S52B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | RS485-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 130 |  | KLCW8T4-622MC-T2B                                                                      |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | EoC-Unit I/O & RS232-Comm Port      |  | Bcst         |  |   |  |
| 131 |  | KLCW8T4-622MC-W2B                                                                      |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & Commercial I/O |  | Wireless-Unit I/O & RS232-Comm Port |  | Bcst         |  |   |  |
| 132 |  | KLCW8T4-622MM-S22B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | RS232-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 133 |  | KLCW8T4-622MM-S42B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | RS422-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 134 |  | KLCW8T4-622MM-S52B                                                                     |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | RS485-Unit I/O & RS232-Comm Port    |  | Bcst         |  |   |  |
| 135 |  | KLCW8T4-622MM-T2B                                                                      |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | EoC-Unit I/O & RS232-Comm Port      |  | Bcst         |  |   |  |
| 136 |  | KLCW8T4-622MM-W2B                                                                      |  | 6 Chans    | 2 Chans     | 4-Channel TVRO - 75 Ohm; WDM 8:n Central Unit |     | MILSPEC RF & I/O            |  | Wireless-Unit I/O & RS232-Comm Port |  | Bcst         |  |   |  |
|     |  | KLCaaT4-m2ncd-yyyzz<br>Central Unit Configurations<br>Multiplexed Units (Sheet 2 of 2) |  |            |             |                                               |     |                             |  |                                     |  |              |  |   |  |
|     |  | SIZE                                                                                   |  | FSCM       | DRAWING NO. |                                               | REV |                             |  |                                     |  |              |  |   |  |
|     |  | C7YQL0                                                                                 |  | 18011502   | -           |                                               |     |                             |  |                                     |  |              |  |   |  |
|     |  | SCALE: N/A                                                                             |  | SHEET 4 OF |             |                                               |     |                             |  |                                     |  |              |  |   |  |
| 8   |  | 7                                                                                      |  | 6          |             | 5                                             |     | 4                           |  | 3                                   |  | 2            |  | 1 |  |





Note 1

KLCT4-526MM-S42B Shown

17.00

3.125

16.00

19.00

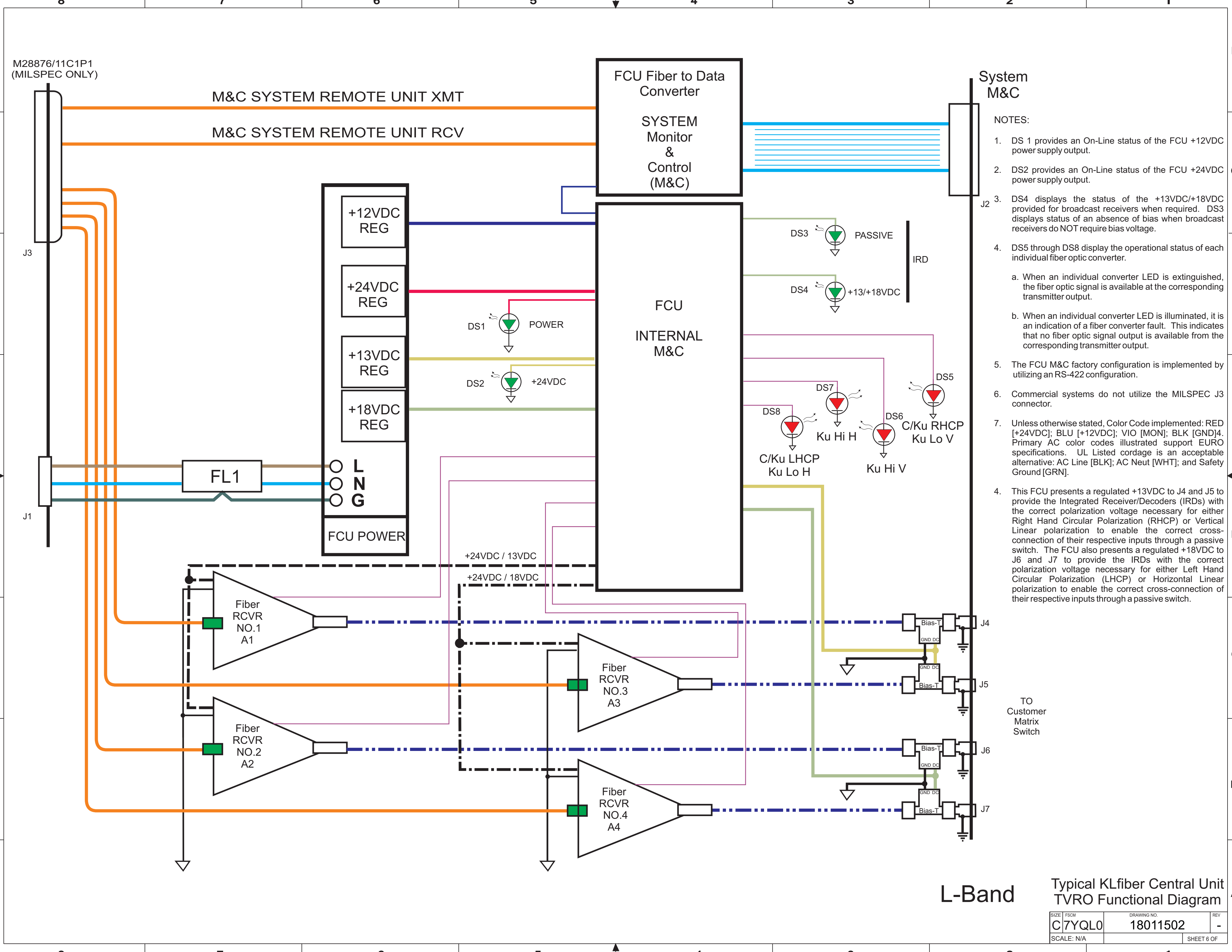
3.50

NOTES:

1. The COMM PORT (J8) is available upon request and is a special order item.
2. The chassis slides are available upon request and are special order items.
3. All dimensions, unless otherwise specified, are in inches.

KLCT4-m26cd-SyyB O&M  
Fiber Converter Unit

|            |      |             |            |
|------------|------|-------------|------------|
| SIZE       | FSCM | DRAWING NO. | REV        |
| C7YQL0     |      | 18011502    | -          |
| SCALE: N/A |      |             | SHEET 5 OF |



System  
M&C

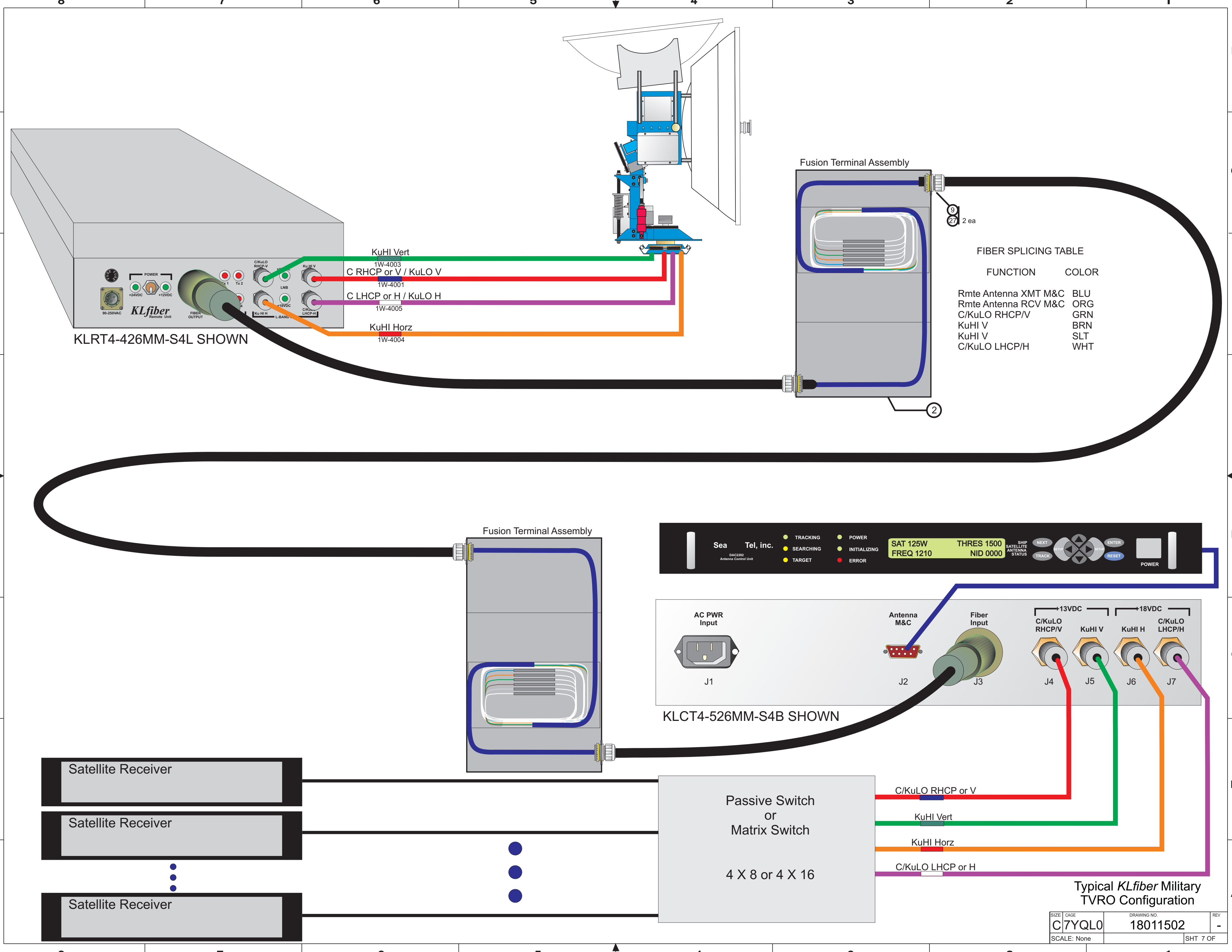
NOTES:

- DS 1 provides an On-Line status of the FCU +12VDC power supply output.
- DS2 provides an On-Line status of the FCU +24VDC power supply output.
- DS4 displays the status of the +13VDC/+18VDC provided for broadcast receivers when required. DS3 displays status of an absence of bias when broadcast receivers do NOT require bias voltage.
  - When an individual converter LED is extinguished, the fiber optic signal is available at the corresponding transmitter output.
  - When an individual converter LED is illuminated, it is an indication of a fiber converter fault. This indicates that no fiber optic signal output is available from the corresponding transmitter output.
- DS5 through DS8 display the operational status of each individual fiber optic converter.
- The FCU M&C factory configuration is implemented by utilizing an RS-422 configuration.
- Commercial systems do not utilize the MILSPEC J3 connector.
- Unless otherwise stated, Color Code implemented: RED [+24VDC]; BLU [+12VDC]; VIO [MON]; BLK [GND]4. Primary AC color codes illustrated support EURO specifications. UL Listed cordage is an acceptable alternative: AC Line [BLK]; AC Neut [WHT]; and Safety Ground [GRN].
- This FCU presents a regulated +13VDC to J4 and J5 to provide the Integrated Receiver/Decoders (IRDs) with the correct polarization voltage necessary for either Right Hand Circular Polarization (RHCP) or Vertical Linear polarization to enable the correct cross-connection of their respective inputs through a passive switch. The FCU also presents a regulated +18VDC to J6 and J7 to provide the IRDs with the correct polarization voltage necessary for either Left Hand Circular Polarization (LHCP) or Horizontal Linear polarization to enable the correct cross-connection of their respective inputs through a passive switch.

L-Band

Typical KLfiber Central Unit  
TVRO Functional Diagram

|            |      |             |            |
|------------|------|-------------|------------|
| SIZE       | FSCM | DRAWING NO. | REV        |
| C7YQL0     |      | 18011502    | -          |
| SCALE: N/A |      |             | SHEET 6 OF |



FIBER SPLICING TABLE

| FUNCTION             | COLOR |
|----------------------|-------|
| Rmte Antenna XMT M&C | BLU   |
| Rmte Antenna RCV M&C | ORG   |
| C/KuLO RHCP/V        | GRN   |
| KuHI V               | BRN   |
| KuHI H               | SLT   |
| C/KuLO LHCP/H        | WHT   |

Sea Tel, inc.

● TRACKING

● SEARCHING

● TARGET

● POWER

● INITIALIZING

● ERROR

SAT 125W  
FREQ 1210

THRES 1500  
NID 0000

SHIP  
SATELLITE  
ANTENNA  
STATUS

● NEXT  
● TRACK  
● RETURN  
● ENTER  
● RESET

POWER

AC PWR Input  
J1

Antenna M&C  
J2

Fiber Input  
J3

+13VDC

C/KuLO RHCP/V  
J4

+18VDC

KuHI V  
J5

KuHI H  
J6

C/KuLO LHCP/H  
J7

KLCT4-526MM-S4B SHOWN

Passive Switch  
or  
Matrix Switch

4 X 8 or 4 X 16

Typical KLfiber Military TVRO Configuration



