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| Uppgjord - Prepared Fredrik Hedlund (SYFKHD) | Kontr. - Checked (Sign) SYMNLN | Datum - Date 2003-08-21 | Rev A | Dokumentnr - Document no TR-10410-A |
| Godkänd - Approved SYFKHD | Datum/Sign - Date/Sign | Tillhör referens - File / reference TR-10410-A.doc | | |

Technical description

Configurations of TMB-1900

1 Basic configurations of TMB-1900

The TMB is to be designed in two different versions. One of the versions will include both a downlink- and an uplink amplifier (Bi-directional booster). The other version will only include a downlink amplifier (Mono-directional booster). The two different versions of the TMB-1900 are intended for the following two configurations:

1.1 Configuration A Bi-directional Booster (with LNAs)

Configuration A , (Bi-directional booster) shown below, describes a TMB intended for installation at the top of the tower.

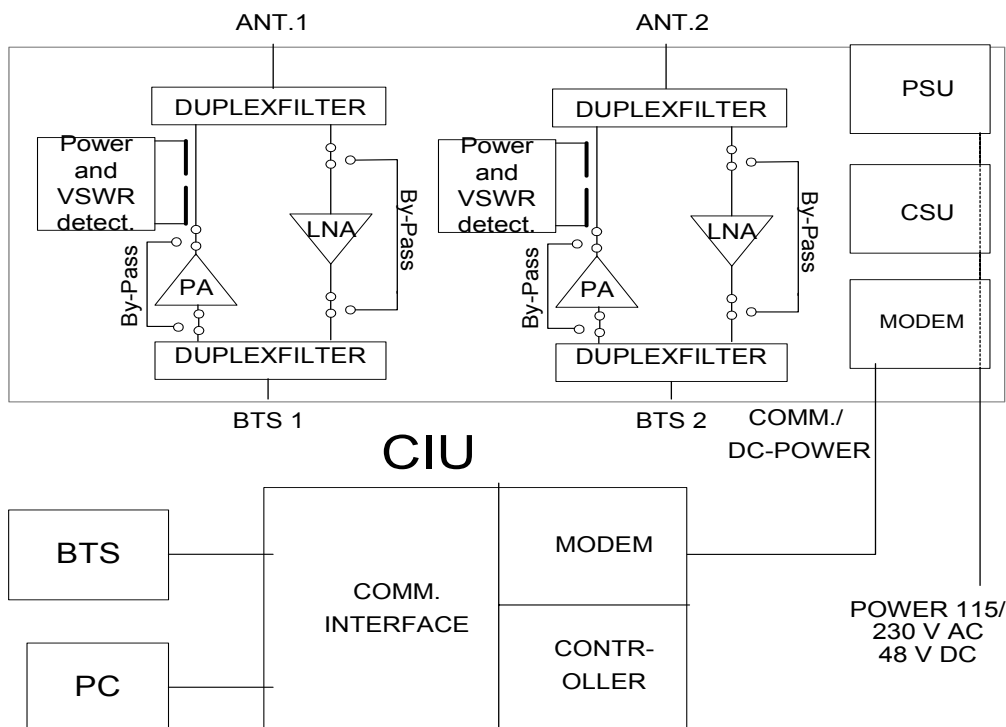


Figure 1. TMB-1900 Bi-directional booster system with port definitions.

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1.2 Configuration B Mono-directional Booster (without LNAs)

Configuration B , (Mono-directional booster) shown below, describes a TMB intended for installation at the bottom of the tower.

This configuration supports external TMA's for improved uplink
The TMB-1900 shall be able to handle up to four external TMA's. (X-TMA)

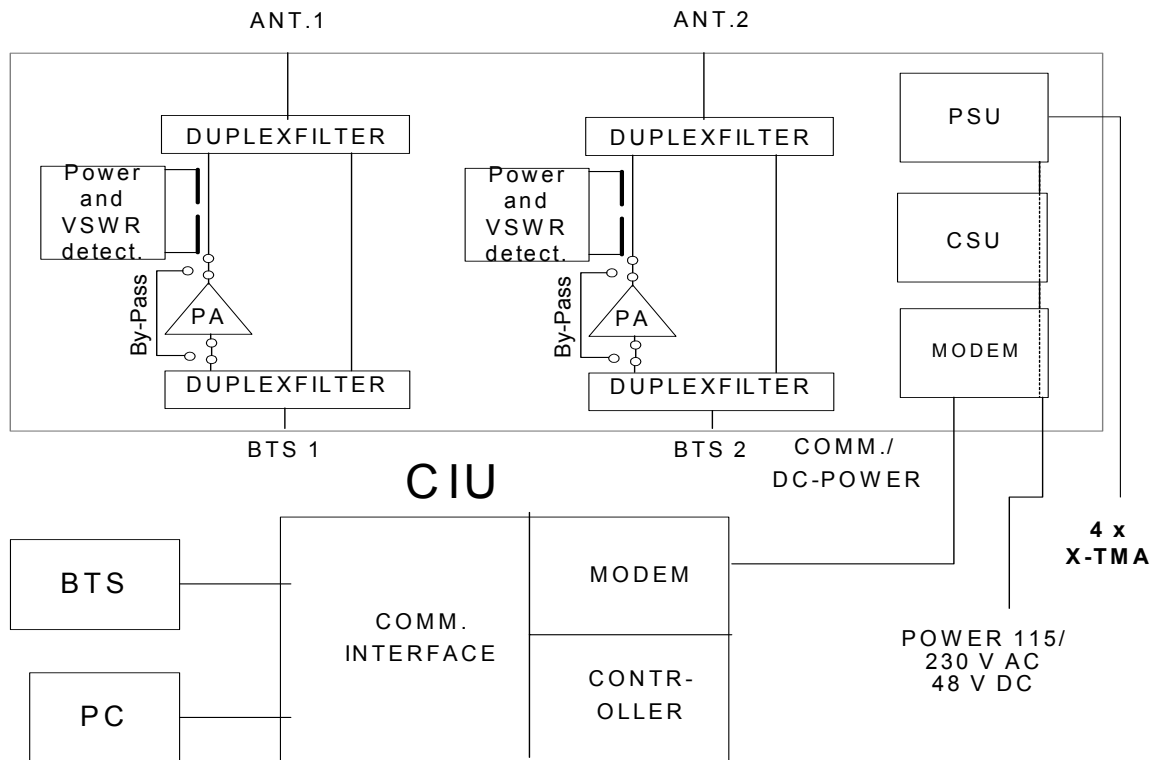


Figure 2. TMB-1900 Mono-directional Booster system with port definitions.

The TMB1900 denotes a booster for two (downlink) carriers with integrated power supply, and external Control and Interface unit. This means that the TMB consists of Power amplifiers (PA), Duplex filters, Power supply (PSU), Control and Surveillance Unit (CSU), Modem and Control Interface Unit (CIU). Ports are defined in figure 2.

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2 FCC compliance testing

The TMB configuration A and B uses the same hardware. The difference between them is that in the configuration B is the LNA not mounted and four DC output ports are added to support external TMA (LNA) as described above. For the FCC compliance tests configuration A was modified with DC output ports to external TMA as a worst case unit.

Product overview

| Product number | TMB configuration | Power supply AC or DC |
|----------------|-------------------|--------------------------|
| LGP01101 | B | AC |
| LGP01102 | B | DC |
| LGP01105 | A | AC |
| LGP01106 | A | DC |