

ABSTRACT**AC DIFFERENTIAL CONNECTION ASSEMBLY BETWEEN
A TRANS-IMPEDANCE AMPLIFIER AND A POST AMPLIFIER
FOR BURST MODE RECEIVING**

An AC differential connection assembly between a trans-impedance amplifier and a post amplifier for burst mode receiving comprising means for coupling a differential output of the trans-impedance amplifier to a differential input of the post amplifier, the means for coupling comprises a coupling capacitor assembly; and a switching circuit coupled across the differential input of the post amplifier, the switching circuit having an 'on' state with low impedance and an 'off' state with high impedance; wherein during burst mode receiving, the switching circuit is in the 'off' state and the coupling capacitor assembly having a time constant to maintain a stable DC level such that a payload is received accurately by the differential input of the post amplifier; and during an idle period, the switching circuit is in the 'on' state and the coupling capacitor assembly having a time constant to recover a DC level of the differential output of the trans-impedance amplifier.

[FIG. 2]