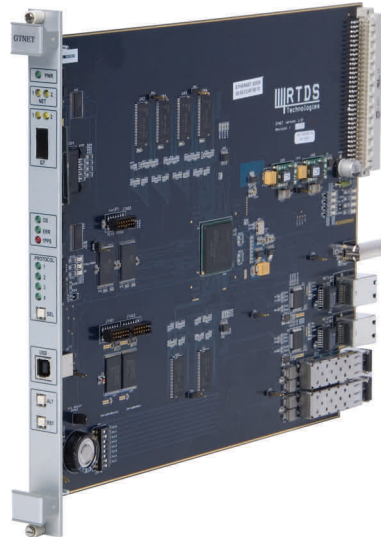


GTNET-PMU



The PMU firmware option for the GTNET provides synchrophasor output data streams according to the C37.118 standard. Two PMU streaming options are available for GTNET-PMU.

Using the first option, a single GTNET-PMU can represent and provide output for up to eight (8) PMU's with symmetrical component information related to 3-phase sets of voltage and current using UDP or TCP connections. The frame rate of each PMU can be set individually between 1 and 60 frames per second. Frame rates as high as 240 frames per second are supported.

Using the second option, a single GTNET-PMU can represent and provide output for up to twenty four (24) PMU's containing only positive sequence data. Frame rates up to the system frequency (50/60 Hz) are supported.

The GTNET-PMU requires the use of a GTSYNC card. The GTNET-PMU component output is synchronized to an external 1PPS, IRIG-B, or IEEE 1588 signal via the GTSYNC card. Three PMU algorithms can be used to measure and estimate the phasor data. One algorithm has been developed by RTDS Technologies and two others are from ANNEX C of the IEEE C37.118.1-2011 standard (P and M class reference models). CBuilder source code is provided for both the P and M class reference models should the user wish to try implementing their own algorithms.