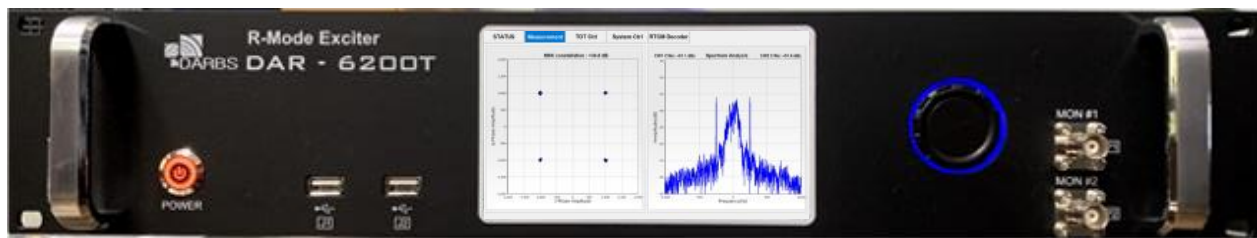


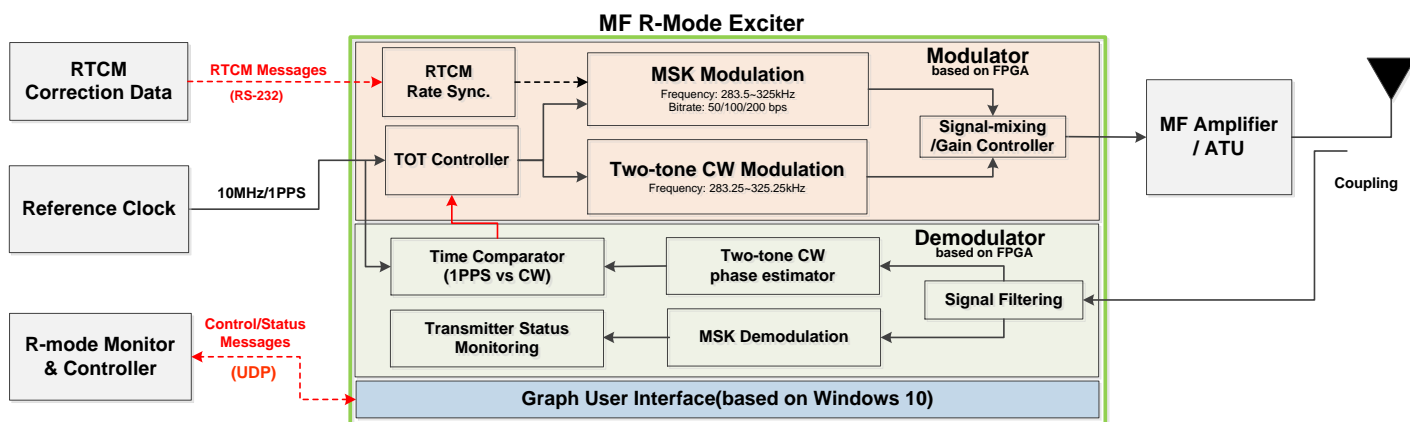
DAR-6200T

MF R-mode Exciter equipped with Transmission signal quality measurement and Automatic TOT(Time of Transmission) control function.



FEATURES

- **MSK Modulation(based on FPGA)**
 - Compliant with minimum requirements as provided in ITU R. M-823-3
 - MSK signal control with frequency, phase and amplitude
 - Works even without receiving the receiving RTCM messages
- **Two-Tone CW Modulation(based on FPGA)**
 - Two independent CW signals control with frequency, phase and amplitude
- **Common specifications for CW signals and MSK**
 - Synchronization of MSK and two CW to an external system clock providing 10MHz and 1PPS
 - MF R-mode signal amplitude control between 0 to 1.0Vpp
- **MSK Demodulation(based on FPGA)**
 - RTCM Decoding
 - Verification of the transmitted MSK signal
- **TOT(Time of Transmission) Control (based on FPGA)**
 - Synchronization of the transmitted signal to UTC time(external system clock)
 - Two independent CW Phase vs 1PPS estimator
 - TOT Auto mode/ Manual mode
- **Measurement function of the transmitted signal**
 - Spectrum, MSK MER, CW C/N, CW vs 1PPS, and etc.
- **User Interface**
 - R-mode exciter control and monitor through GUI
 - R-mode exciter Remote control via Ethernet



GUI INTERFACE

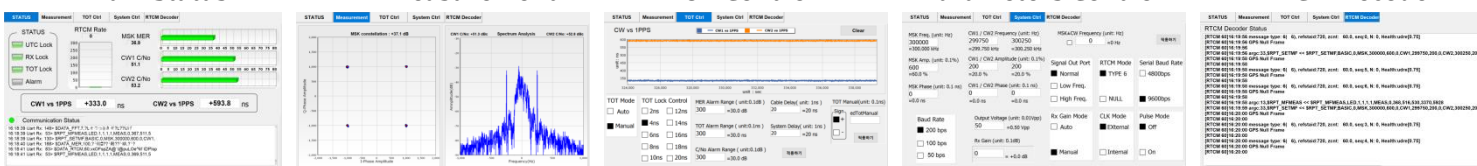
TX. Main Status

TX. Measurement

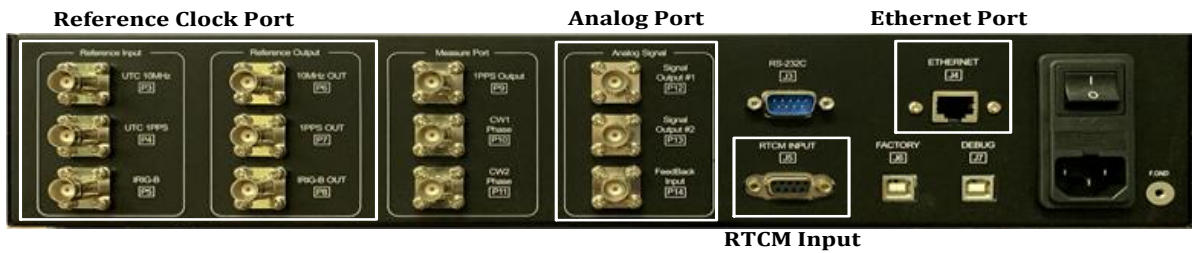
TOT Control

Parameters Control

TX. RTCM Decoder



DAR-6200T



SPECIFICATIONS

- **MF R-mode Modulation**
 - MSK Signal Frequency control : 283.5kHz ~325kHz @1Hz Step
 - RTCM Bit Rate setting : 50/100/200bps
 - MSK Signal Timing control : 1ns Step based on MSK phase
 - CW1/2 Signal Frequency control : 283.25kHz ~325.25kHz @1Hz Step
 - CW1/2 Signal Timing control : 1ns Step based on CW phase
 - Amplitude Control : 0~100%, 1% Step
- **External 1PPS Synchronization**
 - MSK Bit timing uncertainty : <1ns @ MSK Phase vs. 1PPS
 - CW1/2 Signal timing uncertainty : <1ns @CW Phase vs. 1PPS
- **MSK Demodulation**
 - MER Measurement
 - RTCM Decoding
- **CW Phase Estimator**
 - Phase estimator uncertainty : <1ns @CW Phase vs. 1PPS(when CNR>45)
- **TOT Control**
 - Manual mode : 2ns Step(uncertainty <1ns)
 - Auto mode lock range : 2ns ~20ns

SIGNAL INTERFACE

- **Reference Clock**
 - 10MHz Input : +13dBm±3dB @50Ω, BNC
 - 1PPS Input : LVTTTL @50Ω, BNC
 - 10MHz Output : LVTTTL @50Ω, BNC
 - 1PPS Output : LVTTTL @50Ω, BNC
- **Analog Signal**
 - R-mode Output #1 : 0~1.0Vpp @50Ω, BNC
 - R-mode Output #2 : 0~1.0Vpp @50Ω, BNC
 - Feedback Input : Max.2Vpp @50Ω, BNC
- **RTCM Input**
 - RS-232, D-Sub 9P, Female
- **Ethernet Port**
 - RJ-45, Gigabit port
- **Reserved Port**
 - RS-232, D-Sub 9P, Male
 - Measurement Port

GENERAL

- **Dimensions** : 430(W) x 88(H) x 455(D) mm
- **19" Rack Mount type** : 2RU
- **Weight** : < 4Kg
- **Input Power** : 110V ~ 240VAC
- **Power Consumption** : Max. 25W
- **Operating Temperature** : 0℃ ~ 45℃
- **Storage Temperature** : -20℃ ~ 70℃
- **Permissible Relative Humidity** : 85%

USER INTERFACE

- **Display** : 5.5" AMOLED, 1920X1080, Capacitive Touch
- **OS** : Windows 10 Enterprise
- **Front Interface**
 - USB : 2.0 x 2 ports
 - Scroll Knob : setting and changing values
 - Power Button : Auto-Restart When Plugged in