

ME2T-PRO3 TRANSVERTER MEASUREMENTS

Measurements: (by HG5AZB laboratory)

Meas equipments: R&S SMU200/A, R&S FSIQ3, Anritsu MS2661C, MS2668C

Front end: PGA-103+

IF mixer: HJK-3H+

HJK-3H+ [14MHz IF measurements\(pdf\)](#)

TVTR Gain: 25dB Variable ,

LO: 116MHz or 130MHz, +23dBm,

RX OIP3 > +35dBm

RX IP3 +10dBm

RX noise figure measurement (overall)

Direct		NOISE & GAIN			CALIBRATED
RBW:	1 MHz	RFAtten.	0 dB	2nd Stage Corr.	On
Average:	1	Auto Ref Level	On	Image Rejection	...
Current Value					
RF:	30 MHz	ENR	6.4 dB	NF.	1.03 dB
LO:	...	Loss In	0 dB	Noise Temp.	77.68 K
IF:	...	Loss Out	0 dB	Gain	25.93 dB

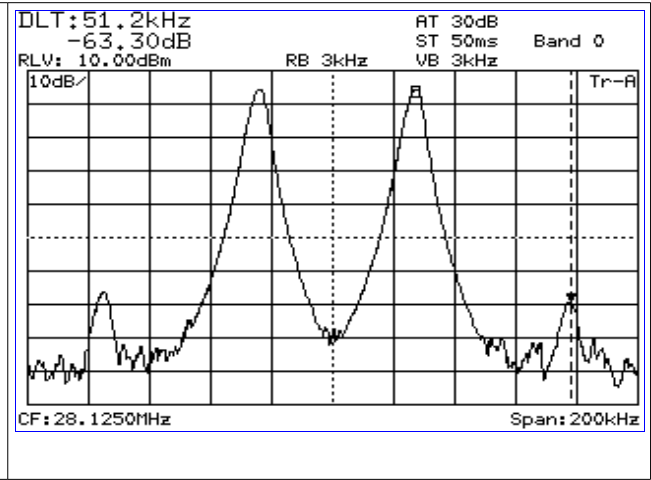
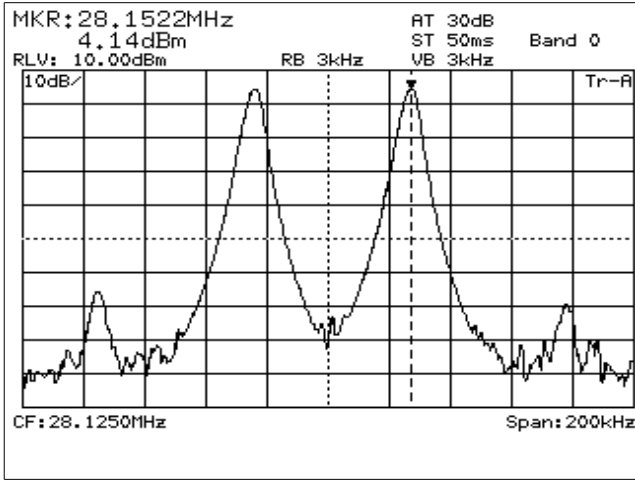
Frequency List Results				
RF	NF	Noise Temp	Gain	
28.00 MHz	0.95 dB	71.16 K	27.61 dB	
28.10 MHz	0.95 dB	70.85 K	27.39 dB	
28.20 MHz	0.99 dB	73.89 K	27.48 dB	
28.30 MHz	0.98 dB	73.53 K	27.28 dB	
28.40 MHz	0.96 dB	71.62 K	27.29 dB	
28.50 MHz	0.99 dB	74.13 K	27.50 dB	
28.60 MHz	1.00 dB	74.94 K	27.11 dB	
28.70 MHz	1.00 dB	74.73 K	27.17 dB	
28.80 MHz	0.98 dB	73.24 K	27.20 dB	
28.90 MHz	0.98 dB	73.50 K	26.40 dB	
29.00 MHz	0.99 dB	74.34 K	26.48 dB	
29.10 MHz	0.97 dB	72.54 K	26.82 dB	
29.20 MHz	1.00 dB	74.83 K	26.40 dB	
29.30 MHz	1.03 dB	77.36 K	26.55 dB	

Running ...

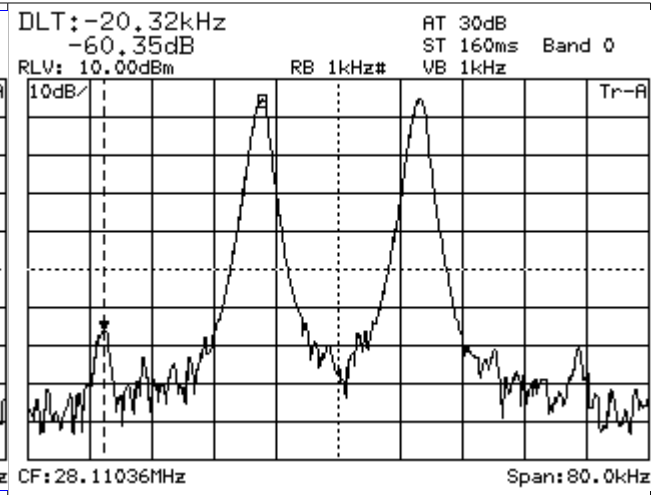
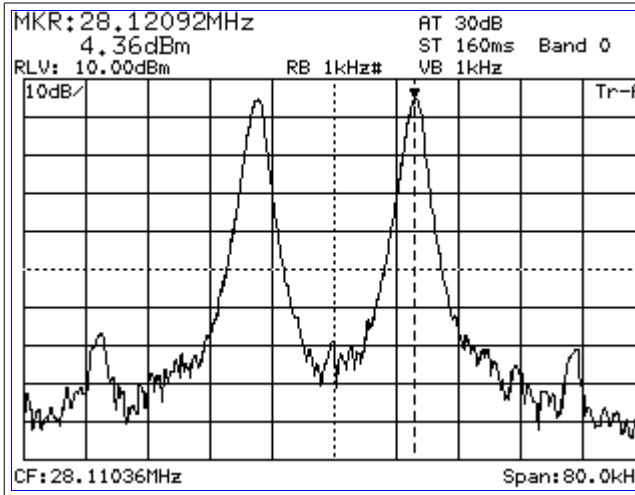
PGA103 1296.BMP

Date: 12. JAN. 2015 09:44:54

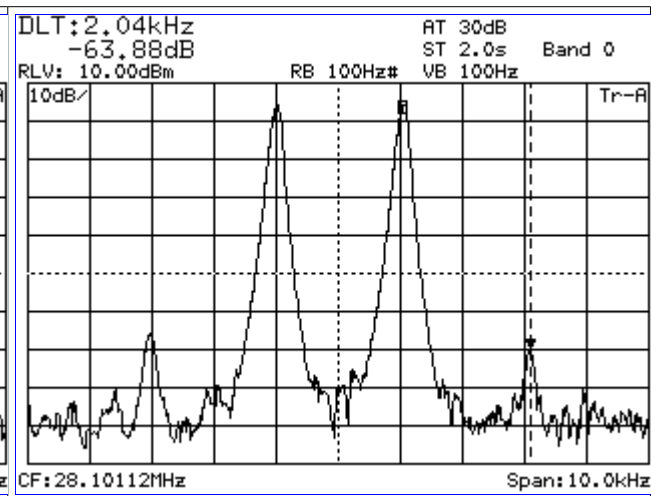
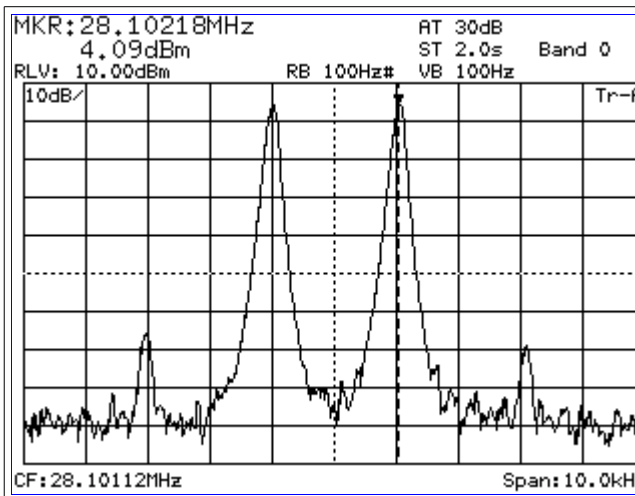
RX OIP3/50KHz



RX OIP3/ 20KHz



RX OIP3/ 2KHz



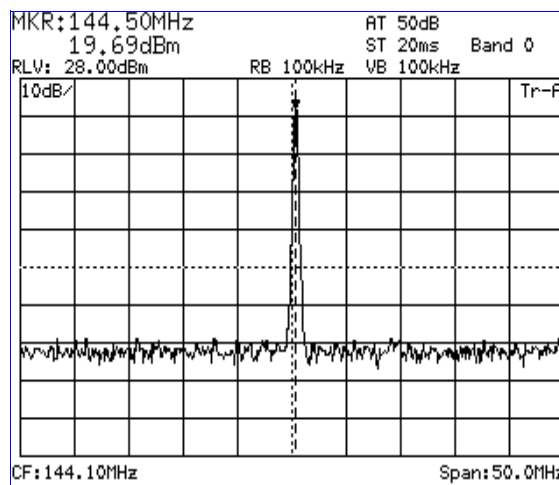
OIP3= +36dBm

RX OIP3 measurement results:

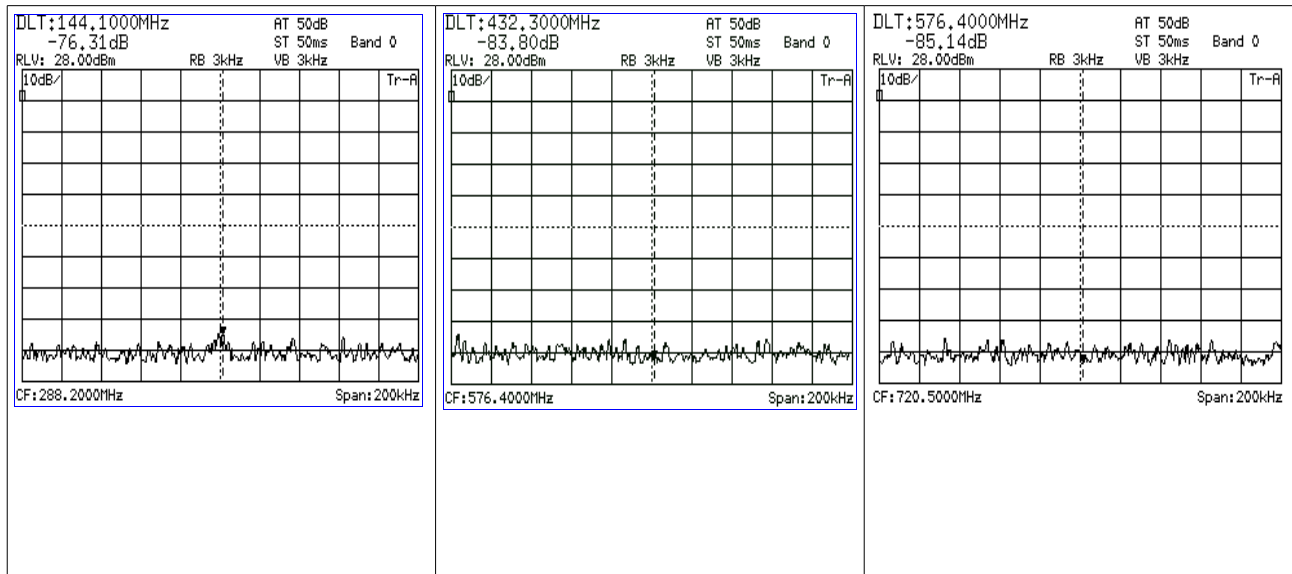
Min. discernible Input Signal (in case TS590S cw BW=500Hz) -146dBm
Max. spurious free Input Signal - 40.7dBm
Spurious free dynamic range 105.3dB

TX Measurements

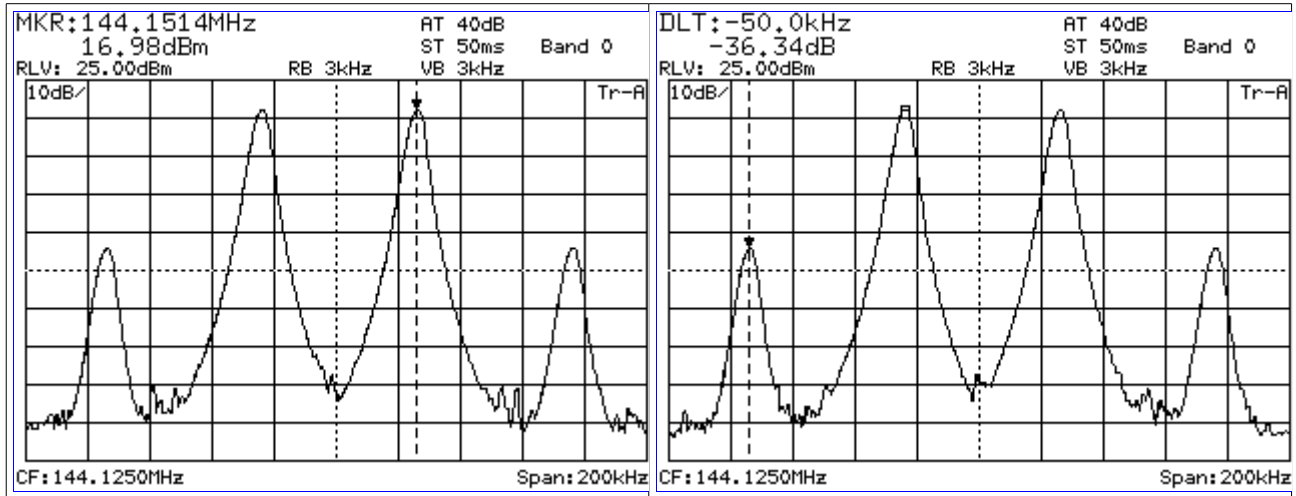
TX output signal (Transverter unit)



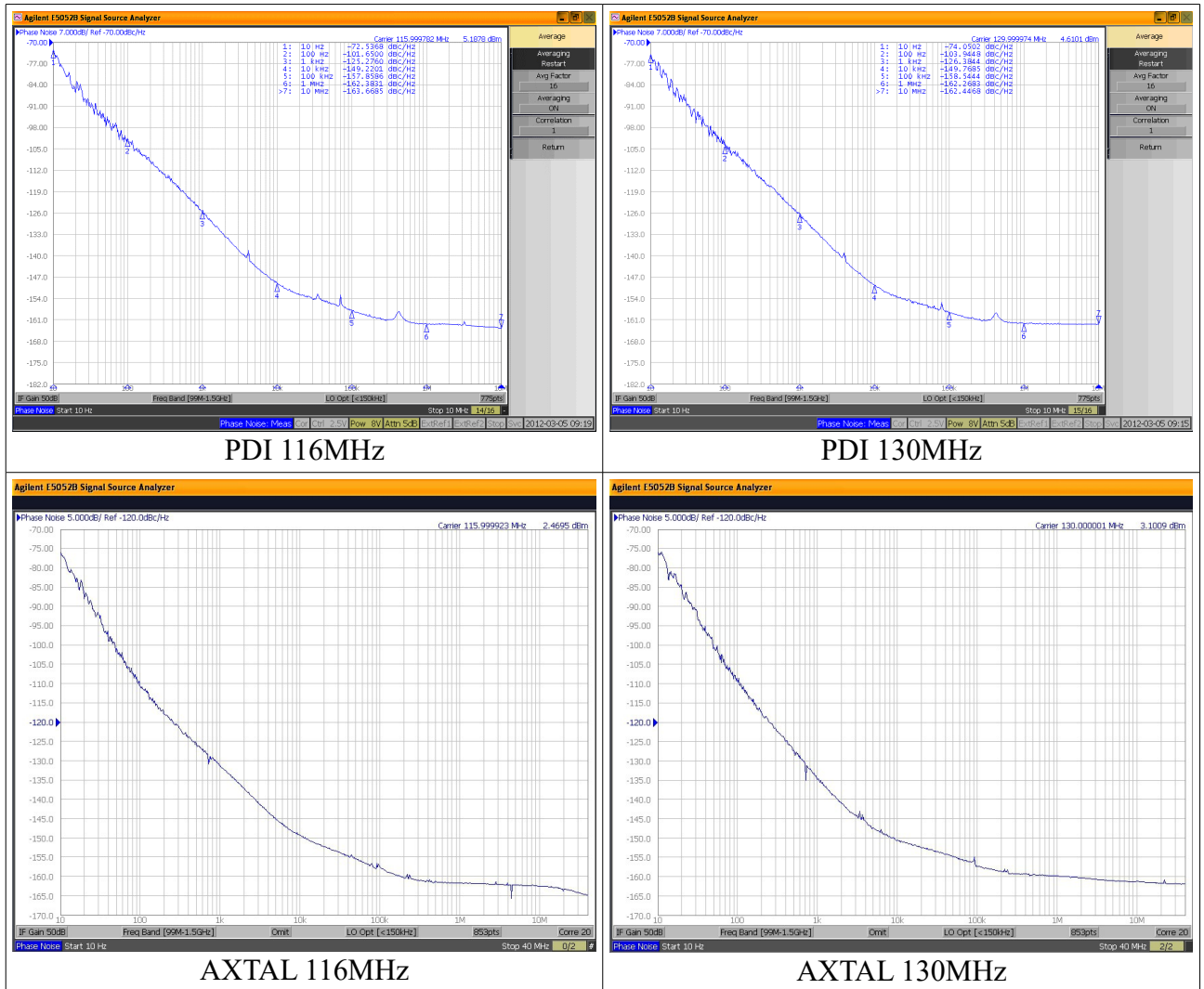
TX Harmonics measurements



TX IM3 Measurements



TCXO PHASE NOISE



AXTAL TCXO [inspection report 130MHz \(pdf\)](#)
 AXTAL TCXO [inspection report 116MHz \(pdf\)](#)