

Technical specifications

H30Crystal	
Mechanical Specifications	
Screen	2.8" TFT 400 x 240 full color
Weight	550 g.
Dimensions	175x100x52 mm / 6,9x3,9x2 (HxWxD)
AC Adaptor	Input: 100-240V~ 50-60Hz Output: 12VDC, 2A
Battery	Li-ion (7,2VDC, 2300mAh)
Battery range	>4hours without LNB powering
Interfaces	Bluetooth, Wi-Fi 2.4GHz / 5 GHz, Ethernet 1Gb USB 2.0 for Data log download and software upgrades
Resilience	It withstands drops From 1 m (3.2 ft) onto concrete on all sides
Storage capacity	400 MB (internal) for measurements
Impedance	F-type connector - 75 Ohm

Technical Specifications									
		593603	593601	593602	593604	593621	593622	593624	593661
Frequency									
Range		Return path: 5-50 MHz / Terrestrial: 50 - 880 MHz / Satellite: 950 - 2400 MHz / Wideband: 250 - 2350 MHz							
Resolution		125 kHz							
Tuning		Frecuencia o canal							
Spectrum analyser									
Span		5, 10, 20, 50, 100, 200, 500 MHz and Full							
Scale		5 and 10 dB/div							
Reference level (automatic and manual)		✓							
Optical fibre									
Not Selective	-40dBm to +7dBm	✓	✓	✓	✓	-	-	-	✓
Selective	-40dBm to +7dBm	-	-	-	-	✓	✓	✓	-
RF Overlay	-10dBm to +5dBm	✓	✓	✓	✓	✓	✓	✓	✓
Optical Attenuation		✓	✓	✓	✓	✓	✓	✓	✓
DVB-S digital measurements [Modulation: QPSK]									

Image		✓	✓	✓	✓	✓	✓	✓	✓
Power	From 45 to 110 dBμV	✓	✓	✓	✓	✓	✓	✓	✓
	From 45 to 120 dBμV	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**
CBER	9.9E-2 – 1.0E-6	✓	✓	✓	✓	✓	✓	✓	✓
VBER	1.0E-4 – 1.0E-8	✓	✓	✓	✓	✓	✓	✓	✓
MER	Up to 20dB	✓	✓	✓	✓	✓	✓	✓	✓
C/N	Up to 20dB	✓	✓	✓	✓	✓	✓	✓	✓
Constellation		✓	✓	✓	✓	✓	✓	✓	✓
DiSEqC		✓							
SCR	EN 50494	✓							
dCSS	EN 50607	Upgrade 593234**							
DVB-S2 digital measurements [Modulations: QPSK, 8PSK]									
Image		✓	✓	✓	✓	✓	✓	✓	✓
Power	From 45 to 110 dBμV	✓	✓	✓	✓	✓	✓	✓	✓
	From 45 to 120 dBμV	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**
Link Margin	Up to 10 dB	✓	✓	✓	✓	✓	✓	✓	✓
MER	Up to 20 dB	✓	✓	✓	✓	✓	✓	✓	✓
LDPCBER*	9.9E-2 – 1.0E-6	✓	✓	✓	✓	✓	✓	✓	✓
BCHBER*	9.9E-2 – 1.0E-8	✓	✓	✓	✓	✓	✓	✓	✓
Constellation		✓	✓	✓	✓	✓	✓	✓	✓
DiSEqC		✓							
SCR	EN 50494	✓							
dCSS	EN 50607	Upgrade 593234**							
DVB-T digital measurements [Modulations: COFDM (QPSK, 16QAM, 64QAM)]									
Image		Upgrade 593231	✓	✓	✓	✓	✓	✓	Upgrade 593231
Power	From 45 to 110 dBμV	Upgrade 593231	✓	✓	✓	✓	✓	✓	Upgrade 593231
	From 45 to 120 dBμV	Upgrade 593231 + Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593231 + Upgrade 593235**

CBER	9.9E-2 – 1.0E-6	Upgrade 593231	✓	✓	✓	✓	✓	✓	Upgrade 593231
VBER	1.0E-3 – 1.0E-8		✓	✓	✓	✓	✓	✓	
MER	Up to 35 dB		✓	✓	✓	✓	✓	✓	
C/N	Up to 40dB		✓	✓	✓	✓	✓	✓	
Echoes			✓	✓	✓	✓	✓	✓	
Constelation			✓	✓	✓	✓	✓	✓	
DVB-T2 digital measurements [Modulations: COFDM (QPSK, 16QAM, 64QAM and 256 QAM)]									
Image		Upgrade 593231 + Upgrade 593232	Upgrade 593232	✓	✓	Upgrade 593232	✓	✓	Upgrade 593232
Power	From 45 to 110 dBμV	Upgrade 593231 + Upgrade 593232	Upgrade 593232	✓	✓	Upgrade 593232	✓	✓	Upgrade 593232
	From 45 to 120 dBμV	Upgrade 593231 + Upgrade 593232 + Upgrade 593235**	Upgrade 593232 + Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593232 + Upgrade 593235**	Upgrade 593235**	Upgrade 593235**	Upgrade 593232 + Upgrade 593235**
LDPCBER*	9.9E-2 – 1.0E-6	Upgrade 593231 + Upgrade 593232	Upgrade 593232	✓	✓	Upgrade 593232	✓	✓	Upgrade 593232
BCHBER*	1.0E-3 – 1.0E-8			✓	✓		✓	✓	
Link Margin	Up to 30 dB			✓	✓		✓	✓	
MER	Up to 35 dB			✓	✓		✓	✓	
C/N	Up to 40dB			✓	✓		✓	✓	
Echoes				✓	✓		✓	✓	
Constelation				✓	✓		✓	✓	
DVB-C digital measurements [Modulations: 16QAM, 32QAM, 64QAM, 128QAM and 256 QAM]									
Image		✓	Upgrade 593233	Upgrade 593233	✓	Upgrade 593233	Upgrade 593233	✓	Upgrade 593233
Power	From 45 to 110 dBμV	✓	Upgrade 593233	Upgrade 593233	✓	Upgrade 593233	Upgrade 593233	✓	Upgrade 593233
	From 45 to 120 dBμV	Upgrade 593235**	Upgrade 593233 + Upgrade 593235**	Upgrade 593233 + Upgrade 593235**	Upgrade 593235**	Upgrade 593233 + Upgrade 593235**	Upgrade 593233 + Upgrade 593235**	Upgrade 593235**	Upgrade 593233 + Upgrade 593235**
CBER	1.E-2 – 1.0E-8	✓	Upgrade 593233	Upgrade 593233	✓	Upgrade 593233	Upgrade 593233	✓	Upgrade 593233
MER	Up to 38	✓			✓			✓	
C/N	Up to 40dB	✓			✓			✓	
Digital measurements ISBT-T/Tb									
Image		-	-	-	-	-	-	-	✓
Power	From 45 to 110 dBμV	-	-	-	-	-	-	-	✓
	From 25 to 120 dBμV	-	-	-	-	-	-	-	Upgrade 593235

Pre-VER (by layer)	9.9E-2 – 1.0E-6	-	-	-	-	-	-	-	✓
Post-VER (by layer)	1.0E-3 – 1.0E-8	-	-	-	-	-	-	-	✓
MER	Up to 35 dB	-	-	-	-	-	-	-	✓
C/N	Up to 40dB	-	-	-	-	-	-	-	✓
Echoes		-	-	-	-	-	-	-	✓
Constellation		-	-	-	-	-	-	-	✓
Analogue measurements									
Level	25 and 125 dBµV	✓	✓	✓	✓	✓	✓	✓	✓
V/A		✓	✓	✓	✓	✓	✓	✓	✓
C/N	Up to 45dB	✓	✓	✓	✓	✓	✓	✓	✓
Measurements and functions									
Wifi analyzer		Upgrade 593250	Upgrade 593250	Upgrade 593250	Upgrade 593250	Upgrade 593250	Upgrade 593250	Upgrade 593250	Upgrade 593250
IPTV analyser		Upgrade 593251	Upgrade 593251	Upgrade 593251	Upgrade 593251	Upgrade 593251	Upgrade 593251	Upgrade 593251	Upgrade 593251
HEVC display (up to 1080p)		Upgrade 593252	Upgrade 593252	Upgrade 593252	Upgrade 593252	Upgrade 593252	Upgrade 593252	Upgrade 593252	Upgrade 593252
Analog A/V display		Upgrade 593236	Upgrade 593236	Upgrade 593236	Upgrade 593236	Upgrade 593236	Upgrade 593236	Upgrade 593236	Upgrade 593236
Terrestrial plans		Channel plans from different regions of the world							
Satellite plans		Channel plans from different regions of the world							
Units		dBµV, dBmV, dBm							
Powering		24 Vdc / 140 mA max. LNB: 13, 18 Vdc / 475, 370 mA max.							
LNB tono		22 kHz							

* Notes:

LDPCBER is the BER measurement before LDPC correction.

BCHBER is the BER measurement after LDPC corrector and before BCH correction.

** Ref. 593234 & 593235: Free upgrade when registering the equipment