



CrossLink TG ADVANCED TELEMATICS UNIT

The **CrossLink TG** is a powerful ARM based telematics unit capable of running advanced data logging and providing cloud connectivity applications as a gateway unit. It accesses data from the vehicle control system via CAN, Ethernet and direct sensor inputs and can communicate via Wi-Fi, Bluetooth and 3G/4G. It supports global GNSS positioning.

CrossLink TG comes with a full-fledged custom Linux operating system and the open and modular LinX software application platform. When using the prebuilt cloud module offered with LinX – Enterprise Connect – the CrossLink TG enables a soft telematics controller, easily configured to run a broad range of telematics functions. The soft

telematics controller can facilitate updates of machine control system software distributed from the cloud system. With this feature, CrossLink TG helps OEMs achieve additional service and aftermarket operations.

Another module available within the LinX platform - Smart Connect – enables CrossLink TG to host expanded HMI functionality. Smart device apps are easily developed with the LinX tools and CrossLink TG pushes machine data to these apps via Wi-Fi or Bluetooth. Typical use cases include additional user interfaces for machine operation and service tools for troubleshooting or deep data mining.

Turn for technical specifications »

Standard models

PART NUMBER	PRODUCT VARIANT	COMMENT
S200 151-01	CrossLink TG, LinX-Base RT	Communication telematics device
C000 151-90	Development kit	Power supply, cable, antenna, connection board

CrossLink TG PRODUCT SPECIFICATIONS

KERNEL	
PROCESSOR	ARM Cortex A8 32bit 800MHz
MEMORY	Internal: 1GB Flash, 512MB DDR3 RAM
EXPANSION	MicroSD Card Slot
SYSTEM	Linux 4.19.94
SOFTWARE	Debian 10 Distribution

HMI	
STATUS LED	4 freely programmable status LEDs
KEY SWITCH	For power control

WIRED COMMUNICATION INTERFACES	
CAN	2 x CAN FD
COM	1 x RS232
ETHERNET	Yes
TPM	TPM 2.0

WIRELESS COMMUNICATION INTERFACES	
UMTS/HSPA+ (3G)	GSM/GPRS/EDGE: Quad band 850/900/1800/1900MHz UMTS/HSPA+: Five band 800/850/900/1900/2100MHz
LTE CAT1 (4G)	Bands: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/ B20/B25/B26/B28
BLUETOOTH	v4.2
WIFI	Dual band, 2.4 GHz and 5 GHz, IEEE 802.11 a/b/g/n/ac. Supports Client and Access point modes.

SENSORS	
ACCELEROMETER	Built-in 3-axis accelerometer, e.g. for detecting collisions, roll-overs or to monitor how a machine is driven.

14 X INPUTS	
DIGITAL	10
ANALOG	4
VOLTAGE INPUT	50V max
FREQUENCY	3kHz max
ANALOG INPUT	12 bit resolution

10 X OUTPUTS	
OPTIONS	8 open collector outputs (100mA each)
CAPACITIVE LOADS	2 high sided switches to Vin for Output, 1A each
MISCELLANEOUS	All outputs have protection from short circuit and overload

GNSS POSITIONING	
RECEIVER	GPS/GLONASS/QZSS/BeiDou/GALLILEO
CHANNELS	72
FEATURES	SBAS: WAAS, EGNOS, MSAS, GAGAN, 4 Hz update rate, 2 meters CEP

POWER	
VOLTAGE	Nominal range 9V – 48V (4G option nominal range 9V to 36V)
POWER CONSUMPTION	0.2mA – 63mA, up to 300mA in extreme cases
BATTERY	10 year RTC backup. Rechargeable Li-Ion battery available as option.

ENVIRONMENT & CERTIFICATIONS	
IP CLASS	IP67
TEMPERATURE RANGE (°C)	-40 to +85
CERTIFICATIONS	E-marking, CE Marking, PTCRB, FCC

ENCLOSURE	
HOUSING	Glass reinforced polyester
CONNECTORS	TE 776163-1 (35 pins) USB host 2.0, RJ45 FAKRA antennas for 3G/4G and GNSS Micro SIM slot (eSIM (MFF2) available as option)

SIZE AND WEIGHT	
W x H x D (mm)	149 x 135 x 58
WEIGHT (g)	400

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