



T-NG-EN54 KIT

Certified IP fire alarm transmission



Security, reliability and certification are the 3 key requirements when one talks about fire alarm transmission. The IRIS T-NG-EN54 KIT addresses all of these and provides a “turn key” solution for the transmission of fire alarms over IP.

Based on the established and renowned IRIS technology, tested and verified by the reputed VDS laboratories resulted in the 0786-CPR-21445 certification allowing for both type 1 and type 2 installations.

The dual-path IRIS 440NG uses IP as its main transmission path with 4G as backup and provides as interfaces to fire alarm panels:

- 16 PIN inputs
- RS232 support for ESPA protocol with conversion to SIA
- RS232 support for Honeywell Notifier, HHL and Panasonic panels

An IRIS T-NG-EN54 kit comprises:

- IRIS Touch 440NG-4G terminal
- IRIS EXT 12 pins extension board
- STX2402C power supply
- Metal enclosure
- External antenna

IRIS Touch 440NG-4G features	
Touch screen	0
Ethernet port	-
4G LTE with auto 3G or 2G fallback	-
Dialport capture	0
Relays	4
PIN inputs	4 standard + 12 additional with EXT-1 or EXT-2 extension board
Serial RS485	0
Serial TTL	0
RS232 (Basic or Full)	1 Full or 2 Basic selectable
CAN bus	0
SMS text messaging	0
Multi language programming menu	0
Build-in VoIP and SIP services	0
Power Supply	
Supply voltage	9 - 28V DC
Quiescent current (12V)	151 mA
Relays	
Relay outputs - max operating voltage	24V DC
Relay outputs - max operating current rating	100 mA DC
Alarm Transmission	
Interface to Alarm Receiving Centre (ARC)	IRIS Secure Apps
Dialport capture interface	Two wire interface via RJ45 socket or terminal screw block
Pin inputs	Input voltage range 0V - 12V DC
	"Low" (Alarm state) threshold <1V
	"High" (Restore state) threshold >2V
Alarm protocols	Internal pull-up 10K tot 3.3V supply
	SIA (Levels 0 to 3)
	Contact ID
	Scancom Fast Format
	Telim
Tamper detection reporting to ARC	On board AUX tamper input - Dialport capture interface - PIN inputs - Serial inputs
Fault detection reporting to ARC	IP transmission path - 2G/3G/4G transmission path
Robofon	
Transmission Paths	
2G/3G/4G	Penta band LTE (4G) 800/900/1800/2100/2600 MHz Dual band UMTS (3G) 900/2100 MHz Dual band GPRS (2G) 900/1800 MHz
Antenna connection	SMA socket
Connection fault detection	Network registration loss
Environmental	
Operating temperature range	-10°C to 55°C
Operating humidity range	95% max. non-condensing
Weight & Dimensions	
Physical dimensions	150mm x 110mm
PCB weight	300 grams
Fully packaged weight	500 grams
Zero-Wait	
Continues and uninterrupted connection to ARC	Instantaneous Up/Download - Configuration - Diagnostics - Firmware Reflash
Certification	
EN50131-1:2006 & EN50136-1:2012	Grade 4
EN50136-2:2013	Grade 4
EN54-21 CPR	✓
VDS	✓
SBSC	✓
FG - FNO	✓
F&P	✓
FKL	✓
ReQ - NCP	✓
INCERT	✓
AS/NZS 2201.5:2008	✓

Specifications STX2401-C		EN54-4 certified 24V 2A + 0.7A intelligent power supply		
Rated voltage	110-240 V ac			
Operational voltage	90 - 264 V ac			
Frequency	50 Hz			
Input current	<1.0 Amps at full load			
Inrush current	5A max at 25°C 110 V ac for 10ms			
Fuse	T1.6 A 20mm 250 V ac HRC			
Output				
Voltage at full load				
Mains power	27.0-28.3 V dc (27.6 V nominal)			
Battery power	20.3- 26 V dc			
Ripple	<100mV pk - pk max @ rated voltage			
Fuse load	F2.5 A			
Fuse battery	F2.5 A			
Battery mode selected				
Continuous output current				
No charging (Imax B)	2.5 A			
Charging (Imax A)	2.0 A			
Battery capacity	2 x 7.0 Ah 12 V			
Constant current charge	0.3 A			
Low battery threshold voltage	23V			
Deep discharge protection	Treshold voltage 21 V			
Quiescent current (no load)	<30 mA @ 27.6 V			
Quiescent current (battery cut off)	<1 mA @ 27.6 V			
Mechanical				
Enclosure dimensions	275 x 330 x 80 mm			
Weight (excluding batteries & T440NG-4G)	3.3 Kg			
Material	1.2 mm steel white powder coated			
Environmental				
Operating temperature range	-10° to +40° 75 % RH non-condensing			
Storage temperature range	-20° to 80°			
Connections & signalling outputs				
Load output +/-	Screw terminals Voltage output to load			
GEN PSU fault (normally closed contact)	0.10A @ 60V dc 16Ω solid state relay contacts, volt free Open if Mains failed and battery voltage <23 volts or fault PSU fault conifion			
EPS Fault (normally closed contact)	0.10A @ 60V dc 16Ω solid state relay contacts, volt free Open if loss of Mains >10 seconds			
Temperature sensor	Thermistor input from supplied battery terminal thermistor			
BATT +/-	Connection to back-up battery using supplied battery lead			
Optional serial interface	5 pin header			
LED indication				
Yellow LED	Fault indicator (See fault diagnostic table in manual)			
Green LED	Mains supply present indicator			
Orange LED	Diagnostic indicator			
Signalling & Diagnostics				
EPS Fault	GEN Fault	Condition	Possible cause	Action
Closed	Closed	Normal operation	Mains present Battery healthy	None
Open	Closed	Standby mode	Mains lost Battery driven load	Investigate loss of Mains
Closed	Open	Fault present	Blown fuses Battery fault Internal fault	Use LED diagnostic for investigation and rectify
Open	Open	PSU shut down	Mains lost Standby battery exhausted	Restore Mains ASAP