

Intellimeter CANADA INC. Innovative Metering Solutions

The XT family of meters is designed to run the same firmware on all meters. Therefore the functionality among all types is similar. There are differences between PCB hardware which makes each of them unique. All Vision meters meet requirements set forth by UL with regard to design, materials and components.

The **Standard XT** meter platform is typically offered when standard features are required. The XT can be equipped with Vision's Data on Demand and Nexgrid's AMI technology. It is offered in all forms and can be equipped with a 200 amp switch in Forms 1S, 2S & 12/25S.

The XT-L (Evolution LTE) is the Standard XT with a 4G LTE modem which can be registered on Verizon's Network. The modem PCB can be equipped with RS 485, Ethernet and Zigbee communications. Communications with the XT-L can be accomplished with Itron's MV-90, Vision's EndSight or 20/20 software. The **XT-L** can be sold with or without UL approval.

Some customers require their meters to be UL approved especially in non-utility applications. Our XT-UL platform has all the same features as the standard XT and some enhancements in the power supply.

The **XT-E** is an enhanced version of our **XT** platform designed specifically for Silver Spring Networks. It has an enhanced power supply and additional circuitry for power failure. All switching circuits for the disconnect switch(s) are on the main board.



Standard XT, XT-L & XT-UL

Communications Options













XT-E



XT-L

LTE Modem PCB



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Displayable Values

Energy Values

KWh Delivered Total KVARh Delivered **KVAh** Delivered KWh Delivered Phase A KWh Delivered Phase B KWh Delivered Phase C KWh Received Total **KVARh** Received Total **KVAh Received** KWh Received Phase A KWh Received Phase B KWh Received Phase C Quadrant 1 KWh Quadrant 2 KWh Quadrant 3 KWh Quadrant 4 KWh Quadrant 1 KVARh Quadrant 2 KVARh Quadrant 3 KVARh Quadrant 4 KVARh

Demand

Max KW Demand Max KVA Demand Max KVAr Demand Cumulative Demand Continuously Cumulative Demand Reset Date Date, Max KW Demand Date, Max KVA Demand Date, Max KVAr **Time of Use** KWh Rate A KWh Rate B KWh Rate C KWh Rate D

Cumulative Demand Continuously Cumulative Demand

Demand KW Rate A Demand KW Rate B Demand KW Rate C Demand KW Rate D

Volts, Amps & PF

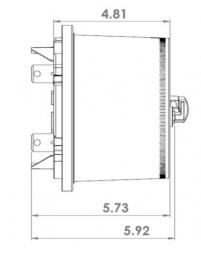
Voltage RMS Phase A Voltage RMS PhaseB Voltage RMS Phase C

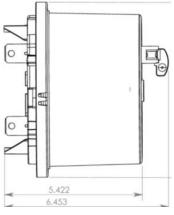
Current RMS Phase A Current RMS Phase B Current RMS Phase C

Phase Angle Phase A Phase Angle Phase B Phase Angle Phase C

Power Factor Phase A Power Factor Phase B Power Factor Phase C Total Power Factor







Standard XT, XT-L, XT-UL



LCD Display Layout



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<mark>Meter Form</mark>	Volts/Class	Platform	Communications	Options	Cover Type
1 Form 1S	A 120V/100A	1 Vision LT	A None	1 None	P Polycarbonate
2 Form 2S	B 120V/200A	2 Vision ST	B HP Airpoint Radio	2 200 A Switch	L Lexan SLX
3 Form 3S	C 120V/320A	3 Vision XT	C Pulsed Output FM C	3 Ext Antenna	
4 Form 4S	D 120V/20A	4 Vision XT AMI	D Pulsed Output FM A	4 Switch & Ant	
5 Form 5S 6 Form 6S	E 240V/200A	5 Vision ST AMI	E RS-485	9 100A Switch	
9 Form 9S	F 240V/320A	7 LT Shielded	F RF/Pulse FM C	0 TSTM Adpt	
R Form 10S	G 240V/20A	8 ST Shielded	G RF/Pulse FM A	D Dual CT's	
P Form 11S				D Dual CT s	
M Form 12S	H 480V/200A	9 XT Shielded	H RF/RS-485		
N Form 25S	J 480V/320A	S XT-E (SSN)	J Data on Demand	C a	atalog
Z Form 16S	K 480V/20A	U XT-UL	K LTE Modem		laivy
C Form 2SM	L 120-480V/200A		N Nexgrid	Nun	nbering
	M 120-480V/320	A	P Silver Spring NIC		neiniä
	N 120-480V/20A		T 3 Airpoints	G	uide
	P 120-480V/100A		V 4 Airpoints	Ŭ	MING
	,		W 5 Airpoints		





GENERAL XT SPECIFICATIONS

- ANSI C12.18, C12.19, C12.20, & C37.90.1 Compliant
- Utilizes Magnetically Shielded Current Transformer(s) forCurrent Measurement
- 120 -480 VAC Input Voltage
- LCD Display is soldered to the board
- 12 Channels of Load Profile,
- Time of Use
- Demand, KW & KVAR
- Reactive Metering
- Four Quadrant Metering
- Event Log
- Delivered, Received and Net Metering
- Alternate Mode with programmable display values
- Accuracy Class +/-0.2%
- Shipped with Accuracy better than +/-0.15%
- Designed for 20 Year Life
- Battery options for Display, Ram, and Clock
- Continuous Instantaneous KW
- Uses Vision 20/20 Software for Programming (included with the purchase of meters at no charge)
- 50/60 Hz +/-5%
- Utilizes Maxim Teridian Technology
- 100 & 200 Amp Switch Option
- 30 Digit User Defined Security Key -40 to +85 Degree C Operation
- 5 to 95% Relative Humidity
- Functions with Itron's MV-90 System.
- Code Numbers assignable to Display Values
- All plastic materials meet or exceeds UL Requirements

XT-E ADDITIONAL SPECIFICATIONS

- Power supply capable of 10 watts @ 4 volts
- Switching circuits for high current switches on main PCB
- Zero crossing circuit for power outage detection

EVOLUTION LTE ADDITIONAL SPECS

- AES 256 Security with Certificate Handling
- Meter/Modem Power Consumption 3.6 watts idling, 6 watts at maximum transmitting
- Approved on Verizon's Wireless System
- Antenna Patent licensed by Trans-Data

All XT Vision Meters Include

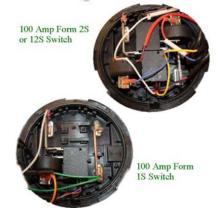
Time of Use KW & KVAR Demand Continuously Cumulative Demand 12 Channels of Load Profile Net Metering Reactive Metering Four Quadrant Metering Event Log

No Extra Charge for Any Features

100 Amp Form 16S Switch



200 Amp Form 2S or 12S Switch



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2020 Programming Software

Configuration Settings	Display	AMR/A	MI Keys	TOU Load	Profile Ever	nt Log M	anage Users
Meter Date: 3/15/2 Meter Time: 3:53:0 Meter Temp: 23.5°0 TOU Off	: # 0 lon: 4.051	Serial Number: 10133000 ERT Number: 0 Meter Form: 25 Battery - Not Installed					
Cumulative Values Cumulative Demand:					Switch -		talled
Cont.Cumulative De	mand: 0	.000	Resets:				
Contraction of the second of		Summation Values kilh del : 0.000 kVAh del : 0.000					
Max kW : 0							
Max kVA : 0 Max kVAr: 0							
Max KVAr: 0		-			kVARh de	1: 0.000	,
Read Meter	leter ID	NX	1013300	0	🗌 Valida	te	Reset Mete
Include Self-Read	Data		Program /	Aeter ID	Reset	Values	Program Met
	isplay Al	MR/AMI	pplication Se Keys T	ttings Help	ofile Event L	og Mana	ige Users
Load Profile Settings	Channel 1		Channel 2		Channel 3		
umber of Channels 12	kWh delivered ~		kVAh delivered ~		kVARh delivered ~		
terval (minutes) 15 v							
	Channel 4		Channel 5		Channel 6 kWh delivered Rate B ~		
	kVARh received ~		kWh delivered Rate A 🗸 🗸		KWI GERVERED Kate B		
Read Load Profile Settings	Channel 7 kWh delivered Rate C ~ Channel 10		Channel 8 kWh delivered Rate D v Channel 11		Channel 9 kVARh delivered Rate A ~ Channel 12		
Program Load Profile							
Settings							
Reset Load Profile	Min Voltage, Phase A 🗸 🗸		Max Voltage, Phase A 🗸 🗸		Avg.Demand del, kW ~		
umber of Days 31 😫	Lo	ad Pro	ofile memo	ory overwrite	will occur	after 42 (days
-Downer							
					Meter Ti	me: 3:38: , H	leter Date: 2/11/20
ter Configuration	erial #	10306	312	Meter ID	Heter Ti		leter Date: 2/11/20
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Vision 2020 Software is capable of programming all variables in the meter. Time of Use, Demand, 12 channels of Load Profile, Net Metering, Reactive and Four Quadrant Metering are programmable. Demand can be programmed for block, rolling, cumulative and continuously cumulative. Programs can be developed and stored under a specific Meter Settings #.

2020 is very intuitive and flows easily from screen to screen. All Vision Meters are supplied with everything included. The meter is only sold in one configuration "LOADED". Thus all functions in 2020 are available to be programmed.

2020 will run on Windows XP, 7, 8 & 10. Security is an integral part of 2020 with tasks selectable by the administrator for all users. Security between 2020 and the meter is also programmable by the administrator.

2020 is also used to communicate with Vision's XT-L LTE modem meters via the Internet.

When communicating with any XT meter it is possible to view the Phasor diagram while on site. The Phasor diagram will provide the voltage and current on all phases along with real and reactive power including the phase angle. It will also show the meter's serial number, form and version of firmware.

2020 is an ideal tool to read and store Load Profile Date. Data can be collected **via the optical port, LTE modem or via** the optional RS-485 port. Load Profile can also be read via Iron's MV-90 System.

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